

THE SCHOOL REVIEW

A JOURNAL OF SECONDARY EDUCATION

VOLUME LI

*

JUNE 1943

*

NUMBER 6

Educational News and Editorial Comment

*

A MISGUIDED ATTACK ON HISTORY-TEACHING

WHILE these news notes were being written, the *New York Times* issued a second blast against the inadequacy of history instruction in the American schools. In June, 1942, this newspaper discovered, among other things, that some of our states do not formally require history-teaching. The educational editor obviously failed to distinguish between formal requirements and the actual curriculum followed by school children. The *Times* stimulated a newspaper campaign in 1942 for a return to "common-sense patriotic learning."

The second attack on the history education of American students appeared in the Sunday edition of the *Times* for April 4, 1943. According to the newspaper, seven thousand Freshman students in thirty-six American colleges and universities in all sections of the country were examined. Tests containing twenty-two questions on a mixture of history, current events, and

geography were prepared under the supervision of Hugh Russell Fraser, chairman of a Committee on American History, and Allan Nevins, professor of American history at Columbia University. The results, according to the *Times*, show that college Freshmen throughout the nation are strikingly ignorant of even the most elementary aspects of American history.

This new *Times* report has been taken up by editorial writers throughout the country, and the subject has even been carried to Congress. Senator Guffey argued that the low scores on the test were due to the emphasis on the contemporary social sciences in the high school. He maintained that the schools should return to old-fashioned history.

Since this campaign of the *Times* is apparently a studied effort to place special pressure on American schools, it seems worthy of critical examination. There are several serious defects in this type of effort to shape the school curriculum.

In the first place, the use of tests and examinations to reveal possible inadequacies in the present product of our educational program is a helpful but only a partial technique for identifying points of needed improvement in the curriculum and the methods of instruction. It is very important that such an evaluation of students' strengths and weaknesses be comprehensive. To identify possible deficiencies in history without at the same time determining inadequacies in science, language, health, social studies, and other subjects, makes it impossible for curriculum planners to utilize the results effectively. A major problem of the school curriculum is to select, from the whole range of desirable educational goals, the most important objectives to be emphasized. It is possible that an unselected sample of the graduates of American schools have a number of deficiencies in their education. They may be unfamiliar with the fundamental ideas of science; their reading tastes and skills may be limited; their health may be unsatisfactory. A comprehensive survey covering all fields would enable curriculum makers to see more clearly the various educational needs of the students, and they could then plan a balanced curriculum to meet the most important of these needs. A survey which covers only certain parts of history leads the *New York Times* to the conclusion that more school time should be spent on history and that laws should be enacted to require more study of history. If this procedure were repeated in each

of the school subjects, it is clear that the results would be a series of laws completely upsetting the balance of the curriculum and providing no opportunity for the schools to determine the most important educational objectives to be sought.

In the second place, such a survey requires a comprehensive and valid test. The use of such a test assumes that what is tested is important for students to remember and thus that low scores can be interpreted as weaknesses in the educational attainments of students. This condition is not met by the *New York Times* history test. Since several fairly satisfactory standardized tests in history are readily available, one can only conclude that such a poor history test was constructed and used by the *Times* because of the desire of those in charge to demonstrate poor achievement on the part of students. The *Times* announced that Professor Allan Nevins helped supervise the construction of the test. Yet this writer has carefully checked the test questions against the recent textbook on American history written by Professor Nevins and H. S. Commager and finds that the answers to 40 per cent of the test questions are not in Nevins' own textbook. Furthermore, although the basic assumption in the study is that knowledge which students are expected to remember is significant knowledge, at least 35 per cent of the material in the *Times* test is of little or no permanent significance. For example, the *Times* report points out that only 3 per cent of the

students knew that President Polk came from Tennessee, only 1 per cent knew that Thomas Hart Benton was a native of Missouri, only 2 per cent could identify Alexander H. Stephens. These are illustrations of questions which relate to content of such little importance that no one would care whether or not students knew the answers.

Another weakness of the test is the unintelligent scoring plan. One of the questions was: "What has been the traditional American policy toward China?" The only answer accepted was, "The open-door policy." Some students answered that we exclude Chinese immigrants, we exploit the Chinese, and give them little aid in their war against Japan. These answers were counted wrong; yet it is clear that the student who wrote such an answer showed as much understanding of our policy toward China as one who answered, "The open-door policy." As another illustration of wrong scoring, the answer counted correct for the location of Portland, Oregon, was, "On the Columbia River," whereas Portland is not on the Columbia but is on the Willamette.

Considering the facts that during the past forty years a large body of techniques of examination construction has been developed and that expert examiners are to be found in every section of the country, the *Times* displays either ignorance or malice in having an examination constructed by novices who show no technical com-

petence in examination construction. The result is lamentable.

The third serious defect in the *New York Times* campaign grows out of the interpretation of the test results. No adequate description is given of the students to whom the test was administered, and no evidence is presented to indicate that all of them took the test seriously. Indeed, from some of the answers, it seems clear that many students did not take the examination seriously. Under these circumstances it is impossible to draw useful conclusions. Senator Guffey's conclusion that the low scores were due to the present emphasis on contemporary social sciences is a case in point. The latest available data show that only a minority of the secondary schools in the United States teach contemporary social sciences, while the vast majority teach only history. It seems obvious, therefore, that the low scores were not due to a lack of historical knowledge on the part of the few students who had studied contemporary social sciences in the secondary schools. A more probable generalization, if the results could be taken at their face value, would be that American history as now taught does not seem important to students, is not well motivated, and does not result in retention of the specific and unrelated facts covered by the test.

It is important to analyze the *Times* attack critically because this attack may be a forerunner of many other efforts to influence the curriculum through special campaigns. School

people generally should be aware of the imminence of this kind of effort and should anticipate biased attacks by obtaining for their own graduates comprehensive data which will show clearly what are the strengths and the weaknesses of our present educational product. Only through unbiased and comprehensive studies can curriculum improvements be intelligently planned.

CURRICULUM EXPERIMENTS

THE Springfield (Missouri) High School has recently issued a report on its experimental curriculum in general education. Some years ago Superintendent H. P. Study and J. D. Hull, then principal of the Springfield High School, arranged for a study of the high-school curriculum by a faculty committee. The report of the faculty in 1941 identified certain weaknesses in the existent program and proposed that a curriculum in general education be developed experimentally in the Springfield High School, where it might be studied by the faculty and the community as a possible basis for adoption throughout the high school.

The faculty approved the proposal and asked the Department of Education of the University of Chicago to provide leadership in developing the curriculum program. Miss Hilda Taba was assigned by the University to serve as consultant to the Springfield High School in the development of this curriculum in general education. During the summer of 1941 a group of

six teachers worked intensively at the University of Chicago workshop in developing the preliminary plans, which were to go into operation in the autumn of 1941 with a group of 250 tenth-grade pupils, comprising about a fourth of the tenth-grade class in Springfield. The program in general education, as developed in the workshop and during the subsequent years, is a core program occupying about half the pupil's time and including mainly social studies, English, and biology.

During the summer of 1941 Mr. Hull resigned to become principal of the Shortridge High School in Indianapolis, and his place in Springfield was taken by John W. Gates, who has been directly responsible for continuing the curriculum experimentation.

In the spring of 1942 a preliminary appraisal of the effectiveness of the tenth-grade program was made. In the light of the strengths and the weaknesses revealed by this evaluation, further modifications were made in the tenth-grade program for the school year 1942-43, and a curriculum for Grade XI was developed during the summer. The curriculum for the Senior year will be developed during the summer of 1943 and will be tried out during the academic year 1943-44. The two years of experimentation have been sufficiently successful so that the new program is to be followed next autumn with all tenth-grade pupils whose parents approve the core plan. Since nearly 90 per cent of the parents have approved, most of the

tenth-grade pupils will be following the new general-education curriculum next September. The experience of the Springfield High School shows the possibility of carrying on, with very little additional expenditure, a curriculum-revision program involving careful study and continued appraisal as the new work is developed.

An experiment with an undifferentiated ninth-year course for elementary-school graduates entering secondary schools has been authorized by the Board of Superintendents of New York City. According to an announcement by Associate Superintendent George F. Pigott, Jr., this experiment will be carried on in two selected areas in the city.

The undifferentiated ninth-year course will provide one year of exploration for high-school pupils, deferring specialization until the last three years of the pre-college program. The experiment will involve a control group. The experimental group will include eighth-grade graduates from one section of the city, who will be sent to an academic high school for the ninth-year exploratory course. These pupils will include not only those who are planning on an academic high school program but also those who express a preference for vocational high school training. The experimental group will be carrying on a program which provides a wide variety of exploratory experiences. In the control group, eighth-grade graduates will be permitted to spend their ninth year in either an academic or a vocational

high school, depending on the course that they select. At the end of the year, studies will be made of the types of courses elected by the vocational pupils.

Postponement of specialization until the close of Grade IX and the use of that grade for exploration have long been recommended by certain leaders in secondary education. In New York this proposal will, for the first time, be subjected to a controlled experimental investigation.

EDUCATION FOR THE ARMED FORCES

A PROGRAM of off-duty education is available to all members of the armed forces. The several branches of the service participate in the work of the United States Armed Forces Institute, formerly called the Army Institute, which has its headquarters at Madison, Wisconsin.

The Armed Forces Institute provides correspondence courses under the two plans which were described in the October, 1942, issue of the *School Review*. More than five hundred courses are available by correspondence instruction through the Armed Forces Institute. The enrolment is about evenly divided between men and women overseas and those in the continental United States. Registrations are increasing at a rapid rate, the new enrolments each month being more than double those of the preceding month.

The off-duty educational program of the Army and the Navy includes opportunity for class instruction as

well as for correspondence courses. Wherever teaching personnel can be found, most of whom are volunteers, classes are organized to meet the demands of the members of the armed forces. The nature of these courses varies widely. In the Panama Canal Zone the popular courses in the Navy include courses in Spanish and geography. Mathematics is popular among both Army and Navy groups. In some of the camps, studio work in art has developed to a surprising point. In some places, discussion groups on contemporary issues have been formed. These off-duty educational opportunities have been greatly facilitated by the development of excellent libraries. The armed forces have the largest library system in the world, and the library facilities in the more permanent camps are better than those in many of the civilian communities in the country.

If we may judge from the experience of the last war, the greatest demand for educational work in the armed forces will come during the period after the armistice is signed and before demobilization takes place. Men and women in the armed services are then looking forward to their reinduction into civilian life. Many of them are concerned with improving their occupational chances and with completing their education. Undoubtedly the period immediately following the armistice will find a tremendous number actively engaged in the educational program of both Army and Navy.

Thus far the Armed Forces Institute has concentrated its attention largely on developing instructional materials in specialized and vocational fields. In the early period of military service, soldiers and sailors are more interested in courses, like mathematics and physics, which contribute directly to military efficiency. After completing their training, however, they are more interested in general education, and this demand is likely to increase greatly as soon as an armistice is signed.

However, the outlines of a program of general education appropriate for the armed forces and the materials for such a program are not yet available. The conditions under which these young men and women carry on their educational work are different from those in civilian institutions, and the students themselves are more mature, are motivated in different ways, and are under different sorts of pressure from those influencing civilians. Hence Colonel Francis T. Spaulding, chief of the Education Branch of the Special Service Division of the Army, and Lieutenant Commander Ralph A. Sentman, officer in charge of the Educational Services Section, Bureau of Naval Personnel, have asked the American Council on Education and the Association of American Colleges to make recommendations regarding a program of general education for men and women in the armed forces.

These two organizations have set up a joint committee, with Dean T. R. McConnell, of the University of Min-

nesota, as chairman, to work out plans for a program of general education for the armed forces and to recommend such plans to the Army and the Navy. The other members of the committee are President James P. Baxter, III, Williams College; Dean Paul H. Buck, Harvard University; President W. H. Cowley, Hamilton College; President Carter Davidson, Knox College; President Edmund E. Day, Cornell University; President Rufus C. Harris, Tulane University; Dr. Guy E. Snavely, Association of American Colleges; Chancellor W. P. Tolley, Syracuse University; Professor Ralph W. Tyler, University of Chicago; and Dr. George F. Zook, American Council on Education.

The work of this committee will be watched with great interest. The committee has been asked to outline a program of general education which will be widely acceptable to the colleges and at the same time appropriate for men and women in the armed forces. It is expected to provide a curriculum which students can begin while they are in the service and, if necessary, can complete after their demobilization. The committee is planning a program of general education to correspond roughly to Grades XI through XIV.

CONTINUANCE OF GRANT FOR WORK IN CHILD DEVELOPMENT

THE Committee on Human Development of the University of Chicago announces the receipt of a grant from the General Education Board to

continue the Collaboration Center in Child Development which was begun under the auspices of the Commission on Teacher Education of the American Council on Education. At this center there has been assembled a collection of recent research materials relating to the development of children and youth. Teachers, supervisors, and administrative officers of school systems, as well as faculty members of teacher-training institutions, are enabled to come to the center for periods of three to twelve months for the purpose of becoming familiar with recent findings in child development and working out plans for their use in connection with problems of curriculum, instruction, guidance, and teacher education.

During the time that the Collaboration Center has been maintained by the Commission on Teacher Education, it has been used by representatives from schools and colleges in many parts of the country. The continuation of this center by the University of Chicago provides a helpful permanent resource for schools and colleges.

CURRENT PROBLEMS IN SECONDARY EDUCATION

IN preparation for the summer workshop in secondary education at the University of Chicago, letters were sent to the principals of a number of the larger high schools in the North Central area, asking for suggestions of the kinds of problems of concern to their schools which might be attacked

in the summer workshop. Replies were received from forty-two large high schools. In most cases the principal stated that the question had been discussed at a faculty meeting and that the replies represented the consensus of the faculty discussion. The problems suggested by these principals can be classified into ten types.

Fifty per cent of the replies mentioned as a major problem: "What curricular adjustments are required to provide more adequately for the promotion of the war effort, especially to provide a more adequate pre-induction training program?" Among the specific problems listed under this head were:

What changes should be made in the present mathematics and science courses?

What changes should be made in instructional methods both to capitalize on the interests and materials relating to the war and to provide a more efficient program?

What curtailment is necessary in the regular work of the schools?

What instruction should be given about the duties and activities of the Army and the Navy?

The second most frequently mentioned type of problem was suggested by 31 per cent of the replies. This had to do with the reconstruction of the secondary-school curriculum in such a way as to relate it more closely to modern life and to provide a more satisfactory integration of the various parts of the total program. Specific questions dealt with the place of the social studies, English, industrial arts, physical education, etc., in the total

program, as well as with the procedures of curriculum reconstruction.

Twenty-six per cent of the replies suggested that the workshop consider the changes which should be made in the curriculum to enable pupils to study material relating to post-war conditions and post-war planning. It is noteworthy that the problems of the post-war period stand high in the list in spite of the great pressure under which secondary schools must operate in providing for the present situation.

Twenty-four per cent of the replies dealt with problems in adjusting the school program to manpower needs. Some of the specific questions had to do with the problems of acceleration, provision of extra-curriculum activities for part-time pupils, the development of satisfactory programs combining school and work, and the development of plans encouraging city boys to spend the summer at farm work.

Twenty-one per cent of the principals asked that the workshop consider the place of the High-School Victory Corps and other special agencies in the activities of the school.

Nineteen per cent suggested that the workshop consider various problems of pupil guidance. Seventeen per cent of the replies dealt with problems in the maintenance of pupil and staff morale in wartime. Some of the specific questions had to do with the maintenance of enrolments, of staff replacements, of salary schedules, and teacher appraisal.

Twelve per cent of the replies suggested problems relating to the emo-

tional effects of the war on adolescents. This grouping included such specific problems as: "What can the school do about juvenile delinquency?" "What changes are necessary in school discipline to provide for the war situation?"

Ten per cent of the replies dealt with the development of a better program of instruction relating to Latin America and to the Far East, while another 10 per cent raised problems of training teachers to handle more adequately the war-related phases of their work.

These letters give an interesting picture of the high-school situation in wartime. They indicate the kinds of problems which seem most important to the faculties of large high schools in the Middle West. Undoubtedly many of these problems will be the subject of special study in the summer workshop.

FARM WORK FOR CITY CHILDREN

THE crisis in farm labor has precipitated much discussion of the ways in which school youth can help. The United States Children's Bureau has issued a bulletin, *Guides to Successful Employment of Non-farm Youth in Wartime Agriculture*, describing ways in which youth may help the farmer harvest crops without injuring themselves and without giving up their education.

According to this bulletin, the experience in 1942 showed that young people from cities and towns, even when inexperienced in farm work, can

aid farmers effectively if they are well supervised. However, the bulletin sounds certain warnings and suggests important safeguards:

Education is important in wartime as in peacetime, and the future manpower needs of the nation would be endangered if boys and girls were deprived of schooling for any considerable period. When school youth must be called upon to help in the emergency during the school term every effort should be made to adjust the school program so that lost school work can be made up. . . .

Plans to recruit city boys and girls for work on farms should not be made until the official agencies have found that there will not be enough older workers available and that there is need for the particular type of project under consideration.

Any plan for using young people as emergency farm workers should consider not only efficient service to the farmer but also the educative value of the experience to the youth themselves. The boys and girls selected should include only those old enough and sufficiently well developed physically to work efficiently and without undue strain. Those who have had little or no previous experience in farm work need to be given special preparation and training for the work and continuous supervision on the job.

The young workers must be helped to understand the purpose of the program and the importance of the contribution they can make to the war effort. Preparation that builds good attitudes, a sense of responsibility and respect for the job will help to prevent carelessness, waste of time, accidents, and destruction of crops and property.

The young workers need advance information on what to expect in the work they are going to do. Misleading publicity that

advertises the job as a vacation seriously interferes with the development of good work attitudes and should be avoided. The recruits should be told what the farmer will expect of them and what will be the probable conditions of work. If they are to live away from home, they should also be told about their probable living arrangements. They should be shown how to do the work efficiently and without injury to themselves or other workers.

Gertrude Folks Zimand, in *Child Manpower—1943*, a bulletin issued by the National Child Labor Committee, outlines three ways in which urban youth are used on farms:

1. *Day Hauls*.—Workers are collected at a central point, are taken out for a day's work, and returned to the assembly point when work is over. Distances may be long or short, transportation may be by truck, bus, or occasionally railroad—but the children live at home. This type of "day haul" labor is especially in demand for harvesting processes, where large numbers of workers are needed seasonally and the farmers have no facilities to house them.

2. *Individual Placements on Farms*.—Young people are placed on individual farms, often dairy farms, for periods varying from a few weeks to the entire summer. They live with the farmer's family and help in the general work of the farm.

3. *Work Camps*.—Camps are organized to house workers in areas where seasonal help is needed. Some camps are operated by youth-serving agencies such as the Y.M.C.A., the Y.W.C.A., the Boy Scouts, or private educational institutions. Others are organized by public agencies concerned with the farm labor shortage, and some are set up by individual farmers or groups of farmers.

Reports of last summer's experience generally agree in mentioning three major factors which determine the success of the farm-work programs.

They are: (1) careful selection of the children to be sent out; (2) preliminary training, or at least preparation, of young people for farm work; and (3) supervision. In commenting on these factors, Zimand states:

When the number of enrollees greatly exceeds the number who can be placed, it should be possible to send out a highly selected group of young people. Even where demand and supply more nearly coincide, it is imperative that there be a more careful selective process than was the case last summer. Some of the factors that must be taken into consideration are: the age of the worker, his health and general physique, his experience, general character, and personality. . . .

Practically all farmers agreed that preliminary training of city boys for farm work, no matter how meager, would be of great help. They believed that such training would automatically weed out many of those who would not make good, would familiarize those who did go out with the type of work they would be expected to do, and in some cases would train them in specific skills. . . .

Equally important is preparatory work with the farmers who are to use boys and girls on their farms, either as resident summer workers or as day workers. The job with the farmers is to make them realize that they may have what, at first, will seem unbelievably inexperienced and untrained workers but who, if handled properly, can become valuable helpers. They must be told that they cannot expect city young people to start in at full speed, that a breaking-in period is necessary, and that their young workers will need very specific direction and a great deal of supervision.

A leaflet used with farmers by the Volunteer Land Corps last summer was entitled "Be Patient with the Boys." It pointed out that: "Although the boys usually do a good job on farms they present different problems to the farmer employer than older workers do.

Boys are young and inexperienced and require careful supervision, patience, and tolerance for best results. Not all farmers have fully realized these facts in the past, consequently there has been some dissatisfaction."

The most important single factor in a successful program is adequate supervision of young people at work and in camp. This was frequently ignored last summer and was without question the most serious element in giving some of the projects a black eye among farmers as well as among young people and their parents.

With the exception of the Volunteer Land Corps, which had a field staff of 11 "mobile trouble shooters" for its 626 young people, there was little attempt at supervision of children placed on individual farms. The Land Corps reports an 80 per cent degree of success but adds "without the field staff, the plan would have collapsed."

Zimand quotes from a statement of the Children's Bureau, reporting on emergency programs operated during 1942:

Provision of suitable supervision of young workers, both at work and outside of working hours if they are living away from home, constitutes the most serious problem which must be met if the use of children and youth as emergency farm workers is to be successful in meeting labor needs and in protecting the interests of young workers.

AN INSTITUTE ON RURAL EDUCATION

THE University of Chicago announces the receipt of an appropriation from the Farm Foundation to plan an Institute on Rural Education at the University. Professor Floyd W. Reeves, of the Department of Education, has been appointed chairman of the planning committee. The projected institute is to facilitate im-

provements in rural education by helping to inform the public about the problems and needs of rural schools, by giving advice and assistance to school officials in rural areas, and by promoting co-operative activities among the several resources in rural areas.

From June 21 to July 31, 1943, Professor Reeves will direct a workshop in rural education for officials of rural schools and representatives of teacher-training institutions. The workshop will be devoted to the critical problems now facing rural education.

SIXTH ANNUAL READING CONFERENCE

THE Sixth Annual Conference on Reading will be held at the University of Chicago, beginning Monday afternoon, July 12, and extending through Friday, July 16, 1943. The central theme of the conference will be "Adjusting Reading Programs to War-time Needs." The program will deal both with challenging issues relating to reading that arise directly out of the war emergency and with other important reading problems that teachers and school officers face today. Because of the large number of topics that should be considered this summer, the conference has been planned even more elaborately than during previous years.

General sessions will be held each afternoon, at which the broader issues of the conference will be considered. The following papers are among those that will be presented at these sessions.

- "The Role of Reading in Wartime—Escape and Fulfilment," May Hill Arbuthnot, School of Education, Western Reserve University
- "Wartime Interests and Needs and Their Relation to Reading Programs," Ralph W. Tyler, Department of Education, University of Chicago
- "Current Demands for Greater Efficiency in Reading—Their Validity and Implications," William S. Gray, Department of Education, University of Chicago
- "The Need for, and Art of, Teaching the Literature of Power and Imagination," John J. De Boer, Editor, *Elementary English Review*; Director of Student Teaching, Chicago Teachers College, Chicago, Illinois
- "Recent Developments in the Art and Science of Map-reading," Edith P. Parker, Department of Geography, University of Chicago
- "The Communication and Interpretation of News in Wartime," Edgar Dale, Ohio State University
- "The Challenge of Poor Readers in Wartime and Basic Principles Underlying Their Identification," Virgil E. Herrick, Department of Education, University of Chicago
- "Co-ordination of Reading Programs in the Chicago Public Schools," Signa Wright, Co-ordinator of Reading for the Superintendent of Schools, Chicago, Illinois
- "The Practical Implications of the Sixth Annual Conference on Reading," Charles D. Lutz, Superintendent of Schools, Gary, Indiana
- "Guidance of Youth in Wartime, with Special Reference to Reading," Augusta Jameson, Guidance Counselor, Laboratory Schools, University of Chicago
- "Reading Materials for Needed Curriculum Enrichment," Helen Butler, Research Specialist, American Library Association
- "Recreational Reading of Youth in Wartime," Isabel Kincheloe, Member of Research Staff, Bureau of Curriculum, Public Schools, Chicago, Illinois
- "Experience, the Key to Literature," Edith E. Shepherd, Laboratory Schools, University of Chicago
- "Types of Growth in Reading Essential at the High-School and Junior-College Levels," Ruth Strang, Teachers College, Columbia University
- "Basic Training in Reading in the New Course of Study in English in Chicago High Schools," Nelle F. Kerchner, Member of Research Staff, Bureau of Curriculum, Public Schools, Chicago, Illinois
- "Promoting Growth in Interpretation in a Three-Year Program in Reading," Russell B. Thomas, The College, University of Chicago
- "Promoting Growth in the Critical Interpretation of Newspapers and Periodicals," Edgar Dale, Ohio State University
- "Reading Problems and Related Types of Guidance in the Social Studies," Kenneth J. Rehage, Laboratory Schools, University of Chicago
- "Demands Made on the Reader and Types of Interpretations Essential in Acquiring a Broad General Education," Clarence H. Faust, Department of English, Dean of the College, University of Chicago
- "Guidance for, and Adjustments to, the Needs of Poor Readers in the Content Fields," Robert L. McCaul, Instructor in Remedial Reading in the High School and the College, University of Chicago
- "Factors Involved in Improvement of Rate and Comprehension in Reading," G. T. Buswell, Department of Education, University of Chicago

Sectional meetings will be held throughout each morning and during the later part of most afternoons for the intensive discussion of problems at various grade levels. The titles of the papers which will be presented before the high-school and junior-college section follow.

"The Work of the Milwaukee Vocational School among Poor Readers," William F. Rasche, Director and Principal, Milwaukee Vocational School

"Nature of the Reading and Study Problems Encountered in Pre-induction Courses in Science," Wilbur L. Beauchamp, Divisions of the Physical and Biological Sciences; Chief Instructor in Radio Theory, Naval Training School, University of Chicago

"Nature of the Reading and Study Problems Encountered in Pre-induction Courses in Mathematics," Maurice L. Hartung, Department of Mathematics, University of Chicago

"Methods of Helping Slow Readers To Meet the Demands of Speed-up Programs," James M. McCallister, Director of Personnel Service, Herzl City Junior College, Chicago, Illinois

Special group conferences under competent leadership will be held each evening for the free discussion of specific problems faced by each group and for the sharing of experiences, the pooling of judgments, and the clarification of thinking. Arrangements are being made for separate conferences for (1) high-school teachers, principals, and reading co-ordinators; (2) junior high school teachers and principals; and (3) those concerned with seriously retarded readers.

The conference will be open, without fee, to students registered for the summer quarter. For those not registered, a fee (including government tax) of \$5.50 will be charged for the conference period, \$1.65 a day (morning, afternoon, and evening sessions), or \$0.83 per session. Copies of the program may be secured from Professor William S. Gray, Department of Edu-

cation, University of Chicago. Those who attend the conference this year may receive University credit by following either of two plans.

The first involves registration in the University for three weeks beginning July 12. By attending the conference and engaging for the two weeks that follow in intensive study in Education 372 B, "Current Reading Problems in the Elementary School"; Education 372 C, "Current Reading Problems in the High School and the Junior College"; or Education 372 X, "Individual and Group Study of Selected Reading Problems," a student may receive credit for one-half course (one and two-thirds semester hours). The tuition fee for residence credit is \$17.50.

The second plan applies to students who cannot remain for three weeks. They may receive credit by attending the conference, completing a program of required readings relating to "Current Reading Problems in the Elementary School" (Education 372 B) or "Current Reading Problems in the High School and the Junior College" (Education 372 C), and passing an examination covering the conference discussions and the assigned readings. Such students should register for the conference on July 12, paying the regular conference fee of \$5.50. They should then register through the Home-Study Department to complete either Education 372 B or Education 372 C, paying the fee of \$10.00 and a Home-Study registration fee of \$2.00.

CONFERENCE FOR ADMINISTRATIVE
OFFICERS OF PUBLIC AND
PRIVATE SCHOOLS

THE twelfth annual conference for Administrative Officers of Public and Private Schools will be held during the week of July 19-23, 1943. The theme of the conference is "War and Post-war Responsibilities of American Schools." Lectures by members of the Department of Education and visiting specialists will be given in the forenoon, and round-table conferences for superintendents, secondary-school principals, and elementary-school principals will be conducted in the afternoon. The conference is open, without fee, to students registered in the summer quarter and to administrators of public and private schools. Persons desiring credit for the conference may receive one and two-thirds semester hours of University credit by paying the regular tuition fee, completing a list of supplementary readings, and passing a comprehensive examination based on the lectures, round-table conferences, and readings.

The demand for University facilities by government agencies makes it impossible for the University to accommodate guests in its dormitories as it has in former years. However, room accommodations can be secured in hotels in the University neighborhood.

Complete information will be mailed to those applying to Professor William C. Reavis, Department of Education, University of Chicago. The conference program follows.

Monday, July 19

CONTRIBUTIONS OF SCHOOLS TO THE SOLUTION OF WAR AND POST-WAR PROBLEMS

"Role of the Schools in the Nation's War Efforts," Ralph W. Tyler, Professor and Chairman of the Department of Education; University Examiner, University of Chicago

"Planning the Responsibilities of the Schools in a Post-war Social Order," Newton Edwards, Professor of Education, University of Chicago

"The Schools and Post-war Manpower Demobilization," Floyd W. Reeves, Professor of Administration, University of Chicago

Tuesday, July 20

THE CHALLENGE TO THE SCHOOLS GROWING OUT OF SCIENTIFIC, TECHNOLOGICAL, AND SOCIAL DEVELOPMENTS BROUGHT ABOUT BY THE WAR

"In Natural and Biological Sciences," Dr. Ralph W. Gerard, Professor of Physiology, University of Chicago

"In the Use of Our Land and Natural Resources," Charles C. Colby, Professor of Geography, University of Chicago

"In the Powers and Services of Government," Louis Wirth, Professor of Sociology, Associate Dean of the Division of the Social Sciences, University of Chicago

Wednesday, July 21

CHANGES IN SCHOOL PROGRAMS MADE NECESSARY BY DEVELOPMENTS BROUGHT ABOUT BY THE WAR

"In the Content of General Education," Henry H. Hill, Superintendent of Schools, Pittsburgh, Pennsylvania

"In Foreign-Language Programs of Secondary Schools," Otto F. Bond, Professor and Chairman, Department of French and Spanish Languages in the College, University of Chicago

"In Practical Arts and Vocational Training," Vernon L. Nickell, State Superintendent of Public Instruction, Springfield, Illinois

Thursday, July 22

CHANGES IN THE PERSONNEL SERVICES OF SCHOOLS MADE NECESSARY BY DEVELOPMENTS BROUGHT ABOUT BY THE WAR

"Personnel Services Needed by Pupils," Daniel A. Prescott, Professor of Education, University of Chicago; Head of the Division of Child Development and Teacher Personnel, Commission on Teacher Education, American Council on Education

"Personnel Services Needed by the School Staff," Stephen M. Corey, Professor of Educational Psychology, Superintendent of the Laboratory Schools, University of Chicago

"School Services Needed by Home and Community," Lloyd Allen Cook, Associate Professor, Department of Sociology and College of Education, Ohio State University

Friday, July 23

WORLD PROBLEMS AND THEIR IMPLICATION FOR POST-WAR EDUCATION

"Prevention of Future Wars through International Organization," Avery O. Craven, Professor of American History, University of Chicago

"Cultivation of Hemispheric Accord through Intercultural Relations," Joseph H. Spear, Executive Director, Pan American Council, Chicago, Illinois

"Responsibilities of Religion and Education for Future International Peace," Ernest C. Colwell, Professor and Chairman of the Department of the New Testament, Dean of the Divinity School, University of Chicago

CONFERENCE ON HUMAN DEVELOPMENT AND EDUCATION

THE annual Conference on Human Development and Education will be held at the University of Chicago on August 9-21, 1943. This will be a working conference, planned to consider the implications for educational

practice of recent research findings in the fields of human growth, learning, and behavior. The program will include (1) a series of presentations by various experts, designed to give a digest of what is known about human development and behavior; (2) working groups of participants and staff members, organized to discuss the implications of this knowledge for particular educational problems of interest to participants; (3) opportunities for examining and studying the materials about human growth, learning, and behavior that have been gathered and prepared in the Collaboration Center of the Commission on Teacher Education of the American Council on Education.

The conference should be of value to supervisors, principals, and experienced teachers in elementary and secondary schools; to school psychologists, deans, and counselors; to school superintendents; to college teachers of psychology, child development, biology, and social science; and to college deans and personnel officers.

Members of the conference will be housed together, if they so desire, at an approximate cost of fifteen to twenty dollars a week for meals and lodging. Academic credit amounting to one-half course may be earned if desired. The conference fee is ten dollars, with a slight additional fee for those wanting academic credit. Complete information may be obtained by writing Professor Daniel A. Prescott, Department of Education, University of Chicago.

RALPH W. TYLER

WHO'S WHO FOR JUNE

Authors of news notes and articles by RALPH W. TYLER,

professor and chairman of the Department of Education and University examiner at the University of Chicago. CHARLES S. DEWEY, formerly engaged in teaching industrial arts and vocational subjects in the secondary schools of Seattle, Washington, and now employed as an engineer in a war-production industry, discusses the contributions of industrial arts to the morale of youth "who live in an insecure present and who must prepare for an unpredictable future." J. ROY LEEVY, assistant professor and director of sociological research at Purdue University, reports the ratings obtained by high-school youth on a "Social Usage Scale." ROY C. BRYAN, principal of Western State High School, a Unit of Western Michigan College, Kalamazoo, Michigan, answers the arguments of those who urge that awards, honors, marks, and similar devices be eliminated from modern education. SALVATORE DiMICHAEL, at the time of the writing of this article a graduate assistant at Fordham University and later employed as supervisor of teaching methods in the Army Air Forces Radio Instructor School at St. Louis University, pre-

sents the findings of an experimental investigation undertaken to determine the effects of a how-to-study course on ninth-grade pupils' knowledge of efficient study techniques. LOUIS FOLEY, professor of English and language consultant in the Psycho-educational Clinic at Western Michigan College, Kalamazoo, Michigan, examines some widely used "objective" language tests and points out specific deficiencies which lead to doubt of their validity. FRANCES SWINEFORD, research assistant in the Department of Education at the University of Chicago, and KARL J. HOLZINGER, professor of education at the same institution, supply a list of selected references in the field of educational statistics.

Reviewers of books KATHRYN D. LEE, teacher in the Laboratory Schools at the University of Chicago. MARTIN V. MCGILL, instructor in chemistry at George Williams College, Chicago, Illinois. ARTHUR D. PICKETT, instructor in the physical sciences in the College at the University of Chicago. ESTHER HOLCOMB, graduate student at the University of Chicago and formerly teacher of English and social studies at Sea Pines School, Brewster, Massachusetts.

INDUSTRIAL ARTS: ITS CONTRIBUTIONS TO THE MORALE OF SECONDARY-SCHOOL YOUTH

CHARLES S. DEWEY

Stanford University, California

*

THE stress of war tests the equanimity of everybody. Changes in established routines, clashes of ideologies, increases in tensions, separations in the home, staggered hours of work, rapid realignments of economic levels—all these are disturbances of civilian life, adaptation to which is difficult for the most adequate adult. A much heavier strain is placed on the adolescent, who, even in the normal environment of peacetime, has a great adjustment to make as he grows into the adult world. For the success of the war and the welfare of every American, good morale constitutes a tremendously important aspect of civilian life.

Good morale implies that an individual has faith in his own expanding ability to cope with his share of personal and social problems. He is confident, but not to an extent unwarranted by good judgment of the facts. He is not overcome by a feeling of futility about the dignity of his part and his adequacy in fulfilling it in his home, his community, and his nation. He can thus make a positive contribution to these groups and can bring satisfaction to himself.

RESPONSIBILITY OF SCHOOLS FOR PUPIL MORALE

All secondary-school pupils need assistance in making the necessary adjustments to a confused war milieu. They are vitally concerned about their relationship to their nation in the crisis. The experience of the English in regard to the results of war on youth should give us caution and example. During their three years of war, the delinquency rate among their boys and girls of 14-17 years of age has increased alarmingly. Many factors contributed to this increase: the confusion of air raids, home tensions, evacuation of cities, absence of fathers and brothers from the family, the psychological effects of accounts of war brutality, the reduction of recreation facilities, the preoccupation of welfare agencies with direct war work, and the additional spending money in the possession of boys and girls.

We must realize that many of these conditions already obtain in our own country and that social agencies are reporting rapid increases in juvenile delinquency in war-production areas. Boys and girls cannot be shielded from all contacts with the deteriorating in-

fluences associated with a war period. Falling prey to crime under such circumstances is symptomatic, not necessarily of any greater malicious tendencies among young people, but of frustrations, fears, and feelings of inadequacy resulting from the disruptions that war has caused in their way of life.

Now more than ever, a serious duty falls on the school. Teachers must assist these pupils by providing constructive activities which are conducive both to the winning of the war and to the growth of the individual who performs them. Although the pupil may not commit crimes which place him without the pale of the law, every secondary-school youth needs positive orientation with regard to his relationship to our current national crisis.

PLACE OF INDUSTRIAL ARTS IN DEVELOPING MORALE

The industrial-arts teacher is in a particularly strategic position to make an increased contribution to the better morale of all high-school boys and girls. The industrial-arts program in general secondary education is always concerned with developmental experiences co-ordinating mental and manual activities. A war economy places renewed emphasis on the dignity of labor and the practical importance of mechanical and industrial efficiency. Because of the psychological value of this emphasis, the administrator and the industrial-arts teacher should make use of it in their public appeal

that the high-school courses in industrial arts be extended to provide for the adjustment of all pupils regardless of their later vocational interests.

The American high school is based on the assumption that more than a minimum of academic literacy is necessary for the adequate adjustment of the individual. However, the public and the educator have considered that mechanical knowledge is essential only for the boys and girls who are to earn their livings by semiskilled or skilled labor. Nevertheless, every pupil in the high school, no matter what his later vocation, must live in a world complicated by blueprints and cleaners, telephones and plastics, chemical agents and electricity, as well as by language and books. Prodigality of human ability has been a tremendous indictment of our peacetime economy; the manpower shortage in the present crisis points up the deficiencies of our previous educational program. This war is the opportune time to make curriculum changes giving an impetus to the industrial-arts work in the secondary school. Such courses should afford to every pupil, boy or girl, the greater security in his environment which comes from at least a minimum of appreciation and knowledge of machines, materials, and manipulative processes and from skill in their control. This background will give the individual a sense of satisfaction and a feeling of adequacy in his material world, a more tangible grasp of the cultural subjects, a greater ability to take his place in the armed

forces or in essential industry, and a more intelligent judgment for participation in post-war planning.

DIFFICULTIES IN WAY OF EXPANDING INDUSTRIAL ARTS

Expansion of the industrial-arts program at this time involves certain administrative difficulties: (1) the scarcity of industrial-arts teachers; (2) the lack of equipment and materials, since many of those needed are now going into the war effort; (3) the curtailment resulting from the placing of greater emphasis on vocational courses for immediate war work.

1. In dealing with the first difficulty, the administrator must remember that directing youth into the proper channels is indeed a wartime job. Concessions must be made in order to keep some of the men who would otherwise teach vocational courses or go into industry. Certain aspects may also be taught by women, and industrial-arts units may often be combined with other subject-matter fields.

2. In contrast with vocational courses, the value of industrial-arts work is not inherent in particular materials or equipment but lies largely in teaching method. Shortages not only test the ingenuity of the teacher but may also contribute to the pupil's appreciation of the experimental method. He will have to use less desirable material, analyze his problem more carefully, plan his work meticulously, and perform the required operations with greater application. Regardless

of the project on which the student is working, there are many concomitant learnings: the willingness to co-operate, the discipline of remaining at a task until it is well accomplished, the resourcefulness which is now at a premium. There are excellent possibilities in a paper carton or an old wooden crate.

3. Before permitting vocational courses to encroach too far on the industrial-arts program in the secondary school, the administrator and the teacher must consider that many of the jobs at present available will perhaps not be open when their pupils, now sixteen years of age or younger, are ready for them. These boys and girls, therefore, should be securing general prevocational backgrounds. Moreover, industrial-arts classes can be so conducted that they will be valuable to every secondary-school boy and girl for personal development now and in the post-war period.

CONTRIBUTIONS OF INDUSTRIAL ARTS

How can industrial-arts courses contribute toward a wholesome morale; the elimination of frustration by the provision of tangible constructive activities; an understanding of aspects of the material world of adults; a greater continuity of a way of life in the school to counteract the instability of a war environment; and the student's realization of his immediate part in his home, his community, and his nation? The following suggestions, certainly not exhaustive, indicate merely a few of the possible modifica-

tions and expansions which can tend toward a more generally useful industrial-arts program for the orientation of all youth.

1. The stress laid on careful work habits in thinking, planning, applying, and performing—traits which the shop can inculcate—is sanctioned by the wartime emphasis on the dignity of labor with both head and hands. When the adults about him are interested in production for winning the war, the youth can secure the satisfaction of practical accomplishment by organizing useful projects in the shop and by obtaining some familiarity with machines, materials, and processes. The school should not be slow in grasping opportunities to inaugurate changes in the required curriculum which will help to make well-rounded individuals of many pupils who, because of its academic prestige, would normally take only the college-preparatory course. These pupils would then be more adequately prepared than are their elders for making economic adjustments and could more easily meet transitions by which many adults today are greatly perturbed.

2. In a total war and in the post-war period of reconstruction, the problems of industry are tremendously important to every citizen. Thus the incentives and the opportunities to bring adolescent boys and girls into the world of adults are now numerous. A factor contributing to delinquency and disillusionment among youth is often our failure to make it possible for them to enter, even vicariously,

into a life for which they think themselves ready. High-school pupils are much interested in the social and the economic problems of the grown-up world. "Why," they ask, "is there no rubber? Why are we confronted with many labor difficulties? What can we do about these things?"

Because of his training, the industrial-arts teacher can, with very little material and equipment, direct field trips, research, and discussion centered in questions of industrial organization, production, distribution, and employer-employee relationships. In direct connection with such study, he can organize work-experience projects in agriculture and industry which not only will provide the best of learning situations but will also make direct contributions toward relieving the labor shortage. These projects may be carried on, for example, with courses in history and economics, the manual and the academic aspects of a given unit thus supplementing and motivating each other.

3. The exploratory and the pre-vocational values of courses in industrial arts are no less indispensable during a period of war than they are in peace. The high school presents little other exploratory opportunity. With a minimum of material and equipment, the industrial-arts classes can give some pupils the inspiration to enter college and professions in science and engineering; others may receive basic knowledge and skills necessary for pre-induction courses or later vocational training, and thus the non-

academic student acquires a respect for mechanical ability, so valuable in wartime. These courses may also serve as a means of identifying those pupils who would be more secure and useful if, instead of being kept in academic classes throughout their high-school careers, they were early directed into vocational courses leading to semiskilled and skilled jobs especially needed in industry and the armed services. Pupils thus fortified will be happier and busier. Every industrial-arts teacher should be intelligently aware of his guidance responsibilities, especially in wartime.

4. Consumer education has a legitimate place in general secondary education. Much of the information and skill in this field is always a part of the curriculum of industrial arts at the high-school level. A war economy means that the chances of walking into a drug store for an ice-cream cone and coming out with a gadget which will revolutionize our lives will become fewer and fewer. With the decrease and even the elimination of many products for civilian use, providing information on the best methods of caring for equipment in order to prolong its usefulness, developing the ability to make repairs on appliances which under normal circumstances would be discarded, and training the pupil in the use of substitutes for products no longer available are tremendous contributions, not only to the comfort and happiness of the pupil and his family, but also to the conservation of critical war materials. The youth who

has learned, through the industrial-arts classes, to assist in these ways has found his personal niche in the war endeavor.

5. Many Americans must, as a part of their transition to a war economy, revise their systems of values and develop an appreciation which transcends the material. The idea that cost is the sole criterion of worth is an aspect of the adult world which we perpetuate by teaching it to children. The leveling of incomes and the scarcity of consumer goods may tend, as they have in England, to place monetary value in its proper perspective. The high-school shop has the concrete facilities for showing that the usefulness of a machine is not measured by its size; that the pleasure derived from a gadget is not commensurate with its purchase price; that improvised substitutes, by their very ingenuity, may bring more pleasure to their inventors than did their expensive predecessors bought extravagantly in pre-war days.

6. The industrial-arts class makes for better understandings among pupils, their parents, and the school. The son may learn to observe the need for oiling the vacuum cleaner, to repair tires, to prolong the life of the radio. Such obvious possibilities are surpassed in importance by a psychological response far more pertinent: through the pupil, his parents have a more concrete contact with the school than that which might come through academic classes, and both the pupil and his parents will be more cognizant of their parts in the war crisis.

7. The war also means many separations in the home. The adult members work on various shifts. The young people receive less guidance from busy parents. Perhaps the father and the older brothers are in the armed forces. Consumers' goods for amusement will be increasingly scarce, and welfare and recreation facilities outside the home will be devoting more of their efforts to direct war work.

Never has the adolescent had more need of confidence in himself. If in the high-school shop he has acquired knowledge and skills which enable him to be more useful in the home, he has, above all, established his own place in that home. Making a piece of furniture, planning decorations for a room, repairing an appliance, and forcing a machine to work for him provide opportunities for ego-support, for gaining, in an unstable world, a feeling of security in family relationships. If the activity represents the best which the youth can do at the time, the fact that the father or the mother could have done better is not significant. Much more important is the continuation of a way of life in the home which will counteract other influences of war-time. More valuable emotionally to the adolescent is a recognition of the place in life of worth-while achievement and of helpfulness in a period of crisis.

8. The high-school pupil has time outside of school which he will spend constructively or otherwise. In these days some of this leisure should cer-

tainly be occupied with part-time work for pay, and thus the young person is likely to have more money than he is accustomed to spending. This money he may often waste on amusements of dubious character; but, if other outlets for his energies are provided, he is more willing to invest it in war stamps. Adolescents are gregarious; this trait is recognized in the formation of the High-School Victory Corps, for which many activities can originate in the industrial-arts classroom. The shop can provide the inspiration for useful mental and manual work which will give emotional release for the boy or the girl. Psychologically such activity is just as valuable for the morale of the adolescent as are knitting and the making of bandages for the morale of women during war. The teacher can assist his pupils in planning home shops and in organizing projects contributing to neighborhood war effort.

9. Many of the ideas, intangible goals, and abstractions for which America is fighting are not sufficiently concrete or immediate to be inspirations to the adolescent. The shop affords an excellent opportunity to translate such goals into activities of mental and manual co-ordination which will be actually helpful in war work and which will give the boy or the girl the feeling of doing an important part. The resourceful teacher finds many such projects within his community.

The boys in some schools have been making airplane models to be used for

training purposes by the Bureau of Aeronautics of the Navy. Some communities have need of blackout equipment, splints, stretchers, and supplies for use in case of fire and bombings. Girls may contribute play equipment and toys for the nursery schools now being established for the children of working mothers. Victory gardens involve the care of tools. The ability to handle machinery is an asset in the farm workers needed in many localities. Some industrial-arts classes have made equipment and have framed pictures for army recreational centers. Newspapers report enthusiastically the work of high-school pupils in the various salvage campaigns. Co-operative work projects, in which work in field or factory has been alternated with study in school, have solved the labor shortages in many communities.

The teacher must use careful judgment in determining the suitability of such activities for his shop classes.

He should be certain that these are actually developmental activities for his pupils and not merely busy-work which other agencies could do more readily.

The teacher of industrial arts must always remember that he is instructing young people who live in an insecure present and who must prepare for an unpredictable future. If he can fortify them with knowledge and skills which will help them gain an increasingly intelligent control of any environment, if he can help them to an orientation of their independent interests that is less involved with material successes, if he can instil in them a greater respect for honest work and a more hopeful faith in the future, then the teacher of industrial arts will make a wartime contribution to the morale of youth which will continue to be productive long after this war is concluded.

SOCIAL COMPETENCE OF HIGH-SCHOOL YOUTH

J. ROY LEEVY
Purdue University

*

SOCIAL efficiency today is evidenced by the behavior of individuals and by the way in which they contribute to the total cultural pattern of society. A person's response when he meets people is thought to be a factor worthy of consideration in the training of youth for good citizenship.

PROBLEMS AND PROCEDURE

Are the secondary schools training youth today for social competence? Are these schools doing all they can to make youth socially graceful? The writer, who was a superintendent of secondary schools for some years in a good middle western state and who is now a professor of sociology in a great state university, has been interested in the answers to these questions for some time. His interest is renewed each semester at the university when he meets many students who come from several different countries and from many different communities. To see these young men and women perform or behave at group meetings (not always athletic contests), in class, or at a dance or a music convocation gives firsthand justification for continued questioning of the social training provided both in high school and in college.

In an attempt to determine the extent of the social competence of youth, the writer devised a "Social Usage Scale." The scale contains 135 questions arranged in eight main divisions, each of which deals with some phase of group life of youth. The sections include varying numbers of questions, ranging from nine to forty. Each question of the scale is valued at one point. The total time required for the pupils to complete the scale is twenty-five minutes. No significance is attached to the number eight nor to the names of the eight divisions. In fact, the scale might easily have contained a dozen or more divisions, depending on one's ideas of the appropriate behavior of youth in high schools. The major headings are "Living with People," "Meeting People," "Eating with People," "Inviting People," "Accepting Invitations," "Corresponding with People," "Dating People," and "Dancing with People." Teachers of home economics and of social studies and guidance counselors gave helpful suggestions which have been incorporated into the scale. The writer realizes that any such device has some weak as well as some strong points as an instrument for measuring the behavior of youth.

The norms for this scale were established by administering the scale to 2,140 high-school pupils, with an equal distribution according to grade enrolment. The scale was administered by English, guidance, home-economics, and social-studies teachers. The populations of the cities in which the schools were located ranged from 2,500 to 10,000, and the high-school enrolments ranged from 250 to 610 pupils. The scale was administered to approximately 60 per cent of the pupils enrolled in each school when the norms were established. The median norms on the entire scale are: Grade IX, 66.8; Grade X, 70.4; Grade XI, 72.4; and Grade XII, 78.4.

The thesis for the study may be stated in a single sentence: "Are high-school youth socially competent today?" The phrase "socially competent" does not refer to the ability to make an A or B mark but to the ability to meet people in a self-respecting and constructive way. How does the behavior of the young people affect the persons whom they meet? Are the youth socially at ease when they eat, dance, or live with others? Some kind of answer to this set of complex questions is attempted in this study.

The scale was administered by home-room teachers, social-studies teachers, guidance teachers, and English teachers to 812 high-school pupils in seven schools of Indiana. The 812 high-school pupils, all of the white race, were distributed according to grade as follows: Freshmen, 22 per cent; Sophomores, 28 per cent; Jun-

iors, 26 per cent; and Seniors, 24 per cent. No attempt was made to obtain an equal distribution of the pupils according to grade enrolment. Fifty-four per cent of the pupils were girls, and 46 per cent were boys—a random sampling so far as sex is concerned. The 812 pupils represent 82 per cent of the total enrolment of high-school pupils in the two school systems with the seven high schools in which the scale was administered.

RESULTS OF THE STUDY

Probably most readers will accept the premise that an indication of the potential social competence of high-school pupils lies in the degree and the effectiveness of their participation in the general socio-civic life of the group to which they belong. The extent to which the home or the school may be held responsible for the pupils' social competence is not determined by the results of the study, nor was the scale set up to provide such a determination. However, the very nature of the questions links both institutions closely together so far as the training of youth in this field is concerned. For example, the following question in the section on "Living with People": "Is it better to break a rule of etiquette than hurt another person's feelings?" may well apply both to school and to the home life of the pupil. Likewise, the question found in the section on "Meeting People": "In introducing a person to a group, is it necessary to repeat his name each time?" may apply to the home as well as to the school. There

are, however, some questions which seem to belong more nearly to school alone than to the home.

Some of the statistical results of the study are shown in Table 1. The low median scores in the section "Living with People" are surprising when it is considered that the total possible score for this section is eleven points. The beginning high-school youngster

dealing with eating. However, not nearly all the median scores approach closely the norm (28.6) for this section of the scale. Many of the pupils seemed to believe that it is necessary for the hostess of a dinner party to wait more than twenty minutes for tardy guests. Fifty-two per cent of the boys and 42 per cent of the girls thought this delay proper.

TABLE 1
MEDIAN SCORES MADE BY PUPILS ON MAIN SECTIONS OF SOCIAL USAGE SCALE

SECTION OF SCALE	HIGHEST POSSIBLE SCORE	MEDIAN SCORE			
		Grade IX (179 Pupils)	Grade X (227 Pupils)	Grade XI (211 Pupils)	Grade XII (195 Pupils)
Living with People.....	11	3.3	4.6	5.1	6.4
Meeting People.....	20	10.0	11.1	11.4	13.6
Eating with People.....	40	16.3	18.3	19.2	22.1
Inviting People.....	14	3.1	3.3	3.6	4.2
Accepting Invitations.....	15	8.2	8.6	9.1	9.4
Corresponding with People.....	9	3.0	3.2	3.4	3.6
Dating People.....	12	3.1	3.8	4.4	5.6
Dancing with People.....	14	6.4	7.2	7.6	8.4
Median on all sections.....	135	50.2	58.3	61.2	68.3

scored only about a third of the total points. The natural question when one interprets such results as these is: "Do youth know how to live with people?" The median scores for the section on "Meeting People" indicate the ineffectiveness of youth in such situations, since only one of the median scores approaches the norm of 14.6 for this section. There is some difference in the median scores of pupils of different grade levels; the Freshmen have lower scores than the Sophomores and the Juniors, and much lower than the Seniors. The highest median scores are found in the section

There were several differences in the replies made by boys and girls to various questions of the scale. The median scores of the boys and the girls are shown in Table 2. The median scores for the girls exceed the median scores for the boys in all sections of the scale. Of course this does not mean that the score of every girl was higher than any score made by the boys. In fact, some boys' scores were higher than those of some of the girls. Some girls made much higher scores than did some of the boys.

The boys' scores on the section of the scale on "Corresponding with

People" were several points lower than the scores made by the boys on any other section of the scale. Boys evidently do not like to write letters, or they were careless in their replies to the questions. For example, in answer to the question: "May a business letter be written on personal stationery?" 80 per cent replied, "Yes." Only 10 per cent of the boys answered the following question correctly:

missed this question, and the other boys missed it in this order: Sophomores, 18 per cent; Juniors, 16 per cent; and Seniors, 10 per cent. Thirty-four per cent of all the girls missed this same question, and the percentages in each class who missed it were: Freshmen, 38; Sophomores, 30; Juniors, 24; and Seniors, 12.

In the section of the scale on "Meeting People," 35 per cent of the Fresh-

TABLE 2
MEDIAN SCORES MADE ON MAIN SECTIONS OF SOCIAL USAGE
SCALE BY 374 BOYS AND 438 GIRLS

SECTION OF SCALE	GRADE IX		GRADE X		GRADE XI		GRADE XII	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Living with People.....	1.4	1.9	1.6	3.0	1.8	3.3	3.0	3.4
Meeting People.....	3.4	6.6	4.5	6.6	4.6	7.8	5.2	8.4
Eating with People.....	6.2	10.1	8.3	10.0	8.6	10.6	9.1	13.0
Inviting People.....	1.1	2.0	1.0	2.3	1.2	2.4	2.0	2.3
Accepting Invitations.....	3.0	5.2	3.1	5.5	3.1	6.0	3.2	6.2
Corresponding with People....	0.2	2.8	1.0	2.2	1.1	2.3	1.3	2.4
Dating People.....	1.0	2.1	1.6	2.2	2.0	2.4	2.0	3.6
Dancing with People.....	2.0	4.4	3.0	4.2	2.0	5.6	3.0	5.4
Median on all sections...	17.4	32.8	23.2	35.1	21.6	39.6	25.9	42.4

"Should a bread-and-butter note be written within a few days after a visit to a friend's home?" Thirty per cent of the boys indicated by a note after this question that they had never heard of a "bread-and-butter note," and some Freshman girls expressed the same reaction. Thirty Senior boys and twenty Senior girls indicated that they did not know what a bread-and-butter note is. Thirty-six per cent of the boys answered the following question incorrectly: "Should a note of sympathy be typewritten?" Twenty-eight per cent of the Freshman boys

man boys missed the following question: "Should a student introduce a high-school chum thus: 'Mother, meet Alice Jones?'" Twenty per cent of the Sophomore boys missed this same question, 16 per cent of the Juniors, and 8 per cent of the Seniors. For the girls the percentages of mistakes on this question were not so large.

Forty-four per cent of the Freshman boys and 20 per cent of the Freshman girls missed the question: "Do men rise for all introductions?" The question: "Is it necessary to knock be-

fore entering a room belonging to a member of one's family?" was missed by 30 per cent of the boys and by 26 per cent of the girls. The pupils of the Freshman class, both boys and girls, led the other pupils in missing this question. The errors on this question may result from the lack of an individual room in one's home. Some pupils were, no doubt, used to sharing a room with another member of the family and did not interpret this question correctly. However, a number of pupils of both sexes who missed this question occupied their own rooms.

Thirty per cent of the boys and 18 per cent of the girls thought that a girl may attend a public dance unescorted. This question was the most frequently missed of all the questions in this section of the scale.

CONCLUSIONS

(1) Since the girls scored higher than the boys, girls are presumed to be more socially competent than boys. (2) High-school pupils improve in social competence in the high school and in the home, since Seniors scored higher than Freshmen. (3) Many high-school youths do not know how to meet people socially. (4) There is a definite need for more training of high-school youth in social living. (5) The training afforded by school parties, dances, and formal and informal teas has probably been taken too much for granted by the faculty sponsors. (6) "Guidance" programs need to be more inclusive.

IMPLICATIONS

As is shown by the tabular data, the pupils' competence in social usage increased as they progressed through high school. How much credit for this gain should be given to the home and how much to the school it is difficult to determine. All the schools in which these pupils were enrolled offered social studies as an elective subject. All schools required three years of English for graduation. It is probable that more social guidance could be given in high school in all classes, regardless of the content of the subject. There seems to be little excuse for the failure of high-school youth to introduce their chums to their teachers and friends. The writer has visited a number of high schools in the past five or six years and has observed how reluctant are many boys and girls to introduce their friends to the teachers. Part of this reluctance may be the fault of the teachers, who have failed to impress the pupils with the importance of meeting people through some form of introduction. A little time in oral English might well be devoted to getting acquainted with visitors.

The low scores earned in the section related to mealtime or eating with people are certainly inexcusable. All the high schools studied offered home economics to girls as an elective, but only two schools (29 per cent) permitted boys to study home-economics courses. In most schools boys were expected to take only those home-economics courses in which the voca-

tional aspect was stressed. It should be possible to interest high-school pupils in home economics without stressing the vocational-training aspect to the extent that social competence is buried. However, to interest pupils in such courses requires a different type of teaching from that which is being done in many high schools today. It calls for a more accurate knowledge of the home than merely knowing whether Johnny's or Susie's father is a skilled laborer or a physician.

How much of the unsatisfactory situation reflected by the low scores on this test can be blamed on the home and how much on the school is hard to estimate. Are parents in such a hurry to get to work or to get to the movies that they do not take time to enjoy their children and to eat properly? In all these schools some form of vocational or educational guidance was provided; all schools had programs of extra-curriculum activities, such as school dances and teas (faculty and

student); and all offered business English as an elective.

Instruction, guidance, and practice in social usages should be provided in high school in order to interest the pupils in this phase of living. The high schools are likely to go "machine mad" today if we are not careful, and administrators may neglect one of the most vital things in life to us all—living with people. War or no war, youth need to be taught how to meet people, how to live with them, how to eat with them, how to invite them into group life, and how to participate in wholesome group living. Far too much "roughhouse" is seen today in public gatherings. Our social patterns of living need refining in order that all human beings may obtain the most from life in the home and in the school. Perhaps if youth are taught the practical side of constructive living, they will be socially competent; they will know how to meet people and how to live harmoniously with their fellows.

IN DEFENSE OF HONORS AND AWARDS

ROY C. BRYAN

Western State High School, a Unit of Western Michigan College
Kalamazoo, Michigan

*

IN RECENT years there has been a tendency on the part of some writers to criticize the practice of granting various kinds of awards to high-school pupils for meritorious accomplishment. Many of the criticisms have not been adequately justified. This article consists of a quotation criticizing honors and awards, a possible statement by a basketball coach who might be imagined to have accepted this critical viewpoint, and some arguments in defense of honors and awards.

THE CRITICS SPEAK

The point of view of the critics of honors and awards is expressed in the following quotation from a recent book.

Need for devices and tricks for stimulating motivation is apparent in the application of the philosophy of the traditional school. Such a school thrives on pressure devices and artificial incentives which serve as substitutes for real interests, needs, purposes, meanings, and values. Awards, contests, marks, and similar devices obviously belong to and have come to us as a heritage from the old school now on its way out in American secondary education.

The origin of such devices and practices is easy to understand. The tasks to be done by the student were determined according to the adult idea of values and needs. . . . The

important problem for the teacher became that of creating purposes which would stimulate the child to engage actively in the tasks which had been set up for him. . . . It became increasingly unnecessary for the clever teacher, who was equipped with these devices, to consider meanings or values. Today, as the heritage from those who followed this pattern of thought, we have the widespread utilization of marks, letters, pins, point systems, badges, promotion, certificates, eligibility requirements, graduation, honor-society memberships, degrees, and numerous other devices—incentives to engage in, and compensation for doing, a job set up by the other fellow. . . .

An examination of the results of the use of devices and other artificial means for the stimulating of certain types of behavior would reveal evidence of their assumed values. Maybe they work, but that alone isn't proof of their value. We may be sure that whatever good effects may be achieved by the use of devices are likely to be temporary rather than permanent. . . . The important consideration, however, is not its immediate effectiveness but rather the real effects and the permanency of the effects. . . . If getting high marks or achieving certain desired honors is necessary to provide incentive for engaging in learning activities provided in the typical curriculum, we do not have a convincing argument in support of such motivation. Rather, we have evidence that much of the typical curriculum and much of the activity which the school is trying to stimulate have little or no relation to student

purposes; it is evidence that the typical curriculum is not concerned with student needs and the claimed values cannot be made convincingly real. . . .

If the preservation of the existing curriculum is the major concern of the school, it should cherish its system of awards, marks, honors, and all its other devices for stimulating the desired pattern of student behavior. If needs of youth, real interests, and significant values are to be given precedence over an antiquated curriculum, then the need for devices for extrinsic motivation will cease to exist.¹

A CONVERT SPEAKS

The following comments might be made by a basketball coach who is meeting his squad for the first time at the beginning of a new season.

Boys, I have just read a book on education that has opened my eyes. I have been convinced that the day is coming when the activities of our schools will be motivated by the real interests, needs, purposes, meanings, and values as seen and felt by youth; and, when that day arrives, artificial incentives like letters, awards, honor dinners, and eligibility requirements will cease to exist. I am optimistic enough to believe that, even though basketball is a part of our traditional curriculum, it does appeal to your interests as much as anything that will be contained in the new curriculum of the new school. Since there will be no need for artificial incentives to motivate student interest in the curriculum of the new school, I don't think we have any need for them in this most interesting part of the old curriculum. I don't want to be a dictator, boys. You don't have to accept my new views. Think them over and give me your reactions later.

¹ William L. Wrinkle and Robert S. Gilchrist, *Secondary Education for American Democracy*, pp. 319-22. New York: Farrar & Rinehart, Inc., 1942.

I should like to see you play basketball this winter purely for the love of the game and for the physical and character development that will result. If you sincerely accept these goals and are fired with real enthusiasm for the game, I won't have to trick you into strenuous and regular activity by artificial devices like honors, awards, and penalties. Furthermore, if you accept my views, these devices, which are a part of the bag of tricks of the traditional school, will not be present to blind you to the real meanings and values of the game.

If I have my way, all eligibility requirements will be eliminated, along with newspaper publicity, which is just another pressure device dragged in as a substitute for real interest in the game. I hope that the love of the game will be strong enough to cause you willingly to forgo letters and basketball emblems, which symbolize the old philosophy at its worst. You need no such extrinsic compensation. You should not desire praise from me for outstanding accomplishment, for that's just another form of the same plague. You should do outstanding work for the values which come to you, not for the extrinsic, artificial value of praise from me. If you fail to show up for practice at any time or break training rules, I shall consider such lapses from the "straight and narrow" as evidence that the activity that we are trying to stimulate is not concerned with your needs and that the claimed values cannot be made convincingly real to you. I shall, in such instances, make renewed attempts to interest you in the values of the game, but I certainly won't stoop to penalties of any kind. You can bank on that.

Also, I hope that you will not look forward to seeing your names in the printed program at our traditional basketball dinner. In fact, I hope you don't want that traditional dinner, which is just another of the many unnecessary extrinsic awards with which we have been tricking you. You should play basketball for the love and value of the game—not for a dinner at which glory

is showered upon you. Please think these things over, boys, and let me have your reactions later.

This quotation has been offered with no intention of arguing for or against the athletic program as it now exists in the high schools. It is here granted that interschool athletic competition has been overdone in many schools and needs some "de-emphasis." But that is not the issue. The burden of Wrinkle and Gilchrist's argument is that honors and awards are a substitute for motivation based on intrinsic interest in an activity itself. It is hard to visualize classroom activities, even in the new school, which will, per se, appeal to boys more than basketball. Yet honors and awards are used liberally in connection with this activity. Wrinkle and Gilchrist's point of view is no more tenable when applied to other phases of the school program than when applied to basketball. It is based on a misconception of the purpose and the nature of honors and awards.

AN ADVOCATE SPEAKS

Giving teachers in traditional schools "credit" for originating the custom of honors and awards is not sensible. Wherever we turn in society—in the home, in the armed services, in the government, in the church, in industry—we find the practice of granting honors and awards. We find this practice used in both primitive and civilized, democratic and totalitarian, societies. This fact seems to indicate that the use of honors and awards satisfies some fundamental hu-

man desire or quality. Psychologists tell us that one of the greatest cravings of human beings is for the feeling of satisfaction or pleasure that comes as the result of acceptance, approval, and recognition by their fellow-men. The widespread practice of granting honors and awards has existed, now exists, and will continue to exist because it helps to meet the need of human beings for approval and recognition by their fellows.

The quoted critics say: "We may be sure that whatever good effects may be achieved by the use of devices are likely to be temporary rather than permanent." This conclusion is based on the assumption that "artificial incentives . . . serve as substitutes for real interests" and that, as soon as the sought prize or artificial incentive has been attained, interest ends. Is this true? What soldier would risk his life for a medal if he were not convinced that the cause for which he is fighting is worth while? What soldier would lay down his arms and quit simply because he had won a medal? What fisherman, having won a prize, immediately would lose interest in fishing? What novelist, having won the Pulitzer prize, would for this reason lose interest in writing? What high-school student, having received an award for outstanding accomplishment in the field of music, would thereafter lose interest in music?

Obviously honors and awards are not, within themselves, substitutes for real interest in an activity. They are simply a form of praise for superior accomplishment. As such, they enable

the recipient to secure added pleasure from the pursuit of an activity. Psychologists tell us that the more pleasure one derives from an activity, the greater one's desire to pursue it. If, then, interest in an activity is stimulated and strengthened by the receipt of praise, recognition, an award, or whatever one chooses to call it, how can one say: "We may be sure that whatever good effects may be achieved by the use of devices are likely to be temporary rather than permanent"? If strengthening an interest tends to add to its chances of permanency, how can we be sure that the effect is likely to be temporary?

Because honors and awards have been used by schools in the past to stimulate activities of doubtful value, it does not follow that these devices should not be used in the schools of today to stimulate activities of real value. All educators, however, do not agree with this conclusion. Wrinkle and Gilchrist write: "Awards, contests, marks, and similar devices obviously belong to and have come to us as a heritage from the old school." The implication is that, since the old school used these means to stimulate activities on which we frown today, we should reject not only the traditional curriculum activities but also the use of the honors and awards which accompanied those activities. The fact that something has been used for unapproved purposes does not mean that it should be rejected along with the unapproved purposes.

Because a person is interested in the honors and awards associated with an

activity, it does not follow that he is not also interested in the intrinsic values of the activity. Wrinkle and Gilchrist say: "If getting high marks or achieving certain desired honors is necessary to provide incentive for engaging in learning activities . . . it is evidence that the typical curriculum is not concerned with student needs and the claimed values cannot be made convincingly real." Following the same logic, we should be justified in saying: "If insignia and medals are necessary to provide incentive for engaging in war activities, it is evident that war activities are not concerned with soldier needs and claimed values cannot be made convincingly real." Also we should be justified in saying: "If the granting of war-production prizes to plants and individual workmen is necessary to provide incentive for engaging in production of war materials, we have evidence that activities related to the producing of war equipment are not concerned with the needs of laborers and claimed values cannot be made convincingly real." The assumption behind this reasoning is that we must make a choice. It is not, however, a question of *either* honors and awards *or* intrinsic interest in the activity but a question of both. They are not mutually exclusive. The presence of the one is not evidence of the absence of the other.

Furthermore, because it is usually easier to talk in terms of symbols than in terms of the values for which the symbols stand, students talk much of marks and the desire for good marks. This fact leads some to conclude that

students care nothing about values but are interested only in marks. There are things which need to be said here. First, it is both desirable and justifiable for the student to be interested in having good reports (marks) in his work. We cannot expect a student to be satisfied with the great values of a course and a poor record of accomplishment any more than we can expect a teacher to be satisfied with the knowledge that he has done an excellent job while the principal sends the superintendent a report which records inefficiency. Second, this interest in marks does not mean a lack of interest in the things for which marks stand any more than a patriot's interest in his country's flag and his talk about it mean that his interest does not extend beyond a piece of colored cloth to the institutions and values for which it stands. It is easier for him to say that he is ready to die in defense of his flag than to say that he is ready to die for an endless series of institutions and values. It is easier for a student to speak about his mark than to speak about progress toward a whole series of values, many of which the teacher himself would have difficulty in defining.

Nothing that has been said should be construed as an argument against improving the present methods of re-

porting a student's progress. Even though the reports are made more elaborate and more analytical, the issues will remain much the same from the standpoint of honors and awards. The student will be interested, and should be interested, in a good report, be it in the form of one mark, a detailed letter, or something else.

The subject of honors and awards is too extensive and has too many ramifications for adequate treatment in a single short article. There is need to go beyond generalizations to the pros and cons of specific honors and awards for specific purposes. Since space does not permit such a detailed treatment, the conclusion of this discussion will be stated in the form of a few generalizations.

That honors and awards have been abused and misused is conceded. That their many possible values are dependent on intelligent use is conceded. That there is no place for them in the modern school is not conceded. The acceptance of this "solution" (so long as one believes that the possible values of honors and awards outweigh their evils) would, for the sake of consistency, call for the elimination of practically all our institutions, devices, and ways of doing things; for practically all of them produce unfavorable results if not used intelligently.

INCREASE IN KNOWLEDGE OF HOW TO STUDY RESULTING FROM A HOW-TO-STUDY COURSE

SALVATORE DiMICHAEL

Fordham University

*

THE student can learn certain study techniques by trial and error in his progress through the various levels of the school. However, teachers have realized that leaving this important matter to chance has proved hopelessly inadequate, and they have, accordingly, devised two formal methods of teaching effective study skills. In the first procedure, the supervised-study method, the student is taught specific study procedures in connection with a certain subject. In it the subject teacher is concerned that the pupil learns the content of the subject matter through his own efforts. The student is expected to seek and find the truth for himself, the teacher guiding him in the use of good specific methods of study. The second way in which the student may learn of the existence of superior study techniques and become effective in their use is by the introduction of a special course designed to impart knowledge of, and provide practice in, those study skills that are common to many specific subject fields. This is the how-to-study course.

Mills has given evidence that would seem to afford reason for questioning the effectiveness of the how-to-study

course on the ground that *knowledge* of what constitutes good study habits made very little improvement in the pupils' use of efficient habits. On a test of eighty-five items, the pupils who took the how-to-study course could answer only fourteen more, on the average, than could pupils who did not take the course. A great part of the difference is ascribed to the fact "that those for whom it served as a pretest were very largely ignorant of the psychological terms used in some of the test items."¹ Cuff concludes from a questionnaire study that pupils from Grade IV to Grade XII showed no progressive increase toward an improvement in study methods. In his opinion, the data "suggest that study habits are formed early as a result of trial and error or of other subtle, selective, and fixative factors and that thereafter the vectors tend to remain constant unless effective remedial programs planned by alert teachers result in changes."²

¹ Henry C. Mills, "What Do High-School Students Know about How To Study?" *Journal of Educational Research*, XXIX (April, 1936), 583.

² Noel B. Cuff, "Study Habits in Grades Four to Twelve," *Journal of Educational Psychology*, XXVIII (April, 1937), 299.

PROCEDURE OF PRESENT EXPERIMENT

In this experimental investigation, an attempt has been made to determine the effectiveness of a how-to-study course in helping ninth-grade pupils gain greater knowledge and deeper understanding of good study techniques. This investigation sought to obtain facts about the following questions. (1) How much do ninth-

TABLE 1
COMPARISON OF EXPERIMENTAL AND
CONTROL PUPILS IN SUPERIOR AND
AVERAGE GROUPS

GROUP	NUMBER OF PUPILS		INTELLIGENCE QUOTIENT		CHRONOLOGICAL AGE (IN YEARS AND MONTHS)	
	Boys	Girls	Mean	Standard Deviation	Mean	Standard Deviation
Superior:						
Experimental	27	24	112.84	6.10	14-1	6.00
Control	27	24	112.02	5.68	14-2	6.44
Average:						
Experimental	22	23	96.96	4.86	14-6	8.92
Control	22	23	98.00	4.79	14-6	8.48

grade pupils know about efficient study habits? (2) Do students of superior intelligence possess a greater knowledge of efficient study techniques than do students of average mental ability? (3) Will the how-to-study course significantly increase the students' knowledge of efficient study skills? (4) What is the reaction of the students concerning the value of the course? Do they consider the course beneficial? In their opinion, what units are relatively more useful?

The 192 subjects for the experiment were taken from Grade IX in a

parochial high school. The pupils were matched on the basis of intelligence quotient, mental age, chronological age, sex, class year, and curriculum. Furthermore, paired pupils came from the same subclass within the Freshman group. The pupils in the experimental group remained with their regular class throughout the day except for the two how-to-study periods a week. During these periods the control pupils remained in their regular rooms for a "study" class, in which they did their assignments under the supervision of the regular teacher. There were twenty-seven sessions in how-to-study instruction, each of forty-five minutes' duration.

On the basis of the matching criteria, two large groups were formed, one the "superior" and the other the "average" group. Table 1 presents a comparison of the groups.

For determining the direct effects of the how-to-study instruction, a measuring instrument was needed that would indicate knowledge of superior study skills. A suitable test has not yet been devised to indicate a student's information with regard to good study habits. Some tests on the market measure only a very limited portion of the study techniques, such as library skills and outlining, but are not comprehensive enough for the purposes of this investigation. The experimenter found it necessary to construct such a tool, which was called the "Knowledge of Study Skills Test." This test served as a measure of the efficacy of the course in how to study.

A deliberate effort was made to exclude psychological or technical terms from the test, and actual use of the test indicated the presence of no difficulties of that sort. None of the students complained of inability to comprehend the items.

The validity of the test was established by the fact that the items were taken mainly from eight standard textbooks in the field of how to study. Moreover, an attempt was made to have the number of items on each topic maintain a proportion according to the emphasis presently being given the topics in the manuals on the subject. More items applied to reading methods and reading comprehension than to any other topic because recent how-to-study textbooks have stressed these phases.

The test is entirely objective and is composed of 81 true-false items, 99 three-choice, 24 four-choice, 9 matching, and 11 recall items, or 224 items in all. No time limit was set for the test, which was administered in two parts, each in a forty-five-minute period. The test reliability, determined by the Spearman-Brown prophecy formula, was found to be $.84 \pm .03$. This test, then, satisfactorily passes the accepted criterion for reliability in view of the fact that the test was submitted to pupils within a single grade range. Tiegs states: "When the reliability of a single grade range of a test is .80 to .85, a three- or four-grade range may yield .95."¹

¹ Ernest W. Tiegs, *Tests and Measurements in the Improvement of Learning*, p. 383. Boston: Houghton Mifflin Co., 1939.

RESULTS

In order to determine the pupils' knowledge of study skills before the special training, an item-by-item analysis was made on the test papers of the two hundred pupils who were selected as experimental and control subjects. Items of a similar type were grouped together, and the percentages of correct, incorrect, and omitted responses were tabulated. The results are listed in Table 2.

It was found that 60 per cent of the 224 items were answered correctly. Among the successful responses, "Knowing how to use the dictionary" topped the list with 84 per cent of correct responses, followed in order by "Knowing how to use the library" (70 per cent), "Memorizing and remembering" (67 per cent), "Concentration" (66 per cent), and "Finding information in a book" (66 per cent). The least amount of knowledge was shown on "Planning a time schedule" (39 per cent) and "Knowledge of important reference books" (41 per cent).

Knowledge about the best methods to use in reading with intelligent comprehension and with speed ranked tenth and thirteenth, respectively, among the sixteen topics. The low rankings of these items indicate that the present emphasis on improvement in reading is justified in how-to-study courses and confirm again the need for remedial reading in high school.

The pupils exhibited too little awareness of the necessity for budgeting their time. These data and the pupils' records of their daily and weekly activities during the term indicate

that the pupils do not realize the need of a plan for the effective use of their waking hours, with the result that study time is left to the whims of the pupils. They know little about the proper ways to prepare for, and to take, examinations. Teachers can find in these results a valid reason for the pupils' poor attitudes toward school.

The special how-to-study instruction proved without doubt that it could significantly increase the students' knowledge of good study techniques. Both the superior and the average experimental groups made substantial gains, as compared with the control groups, in mean scores on the Knowledge of Study Skills Test.

TABLE 2
SUCCESS OF NINTH-GRADE PUPILS ON VARIOUS KINDS OF ITEMS IN
TEST OF KNOWLEDGE OF STUDY SKILLS

CATEGORY	NUMBER OF ITEMS IN TEST	AVERAGE PERCENTAGE			SUCCESS RANK
		Right Responses	Wrong Responses	Omitted Responses	
Knowing how to use the dictionary.....	18	84.0	13.6	2.4	1
Knowing how to use the library.....	10	70.2	23.6	6.2	2
Memorizing and remembering.....	17	66.8	32.7	.5	3
Concentration.....	12	65.6	31.4	3.0	4.5
Finding information in a book.....	11	65.6	31.4	3.0	4.5
Preparing a term paper, theme, or report..	18	63.4	33.3	3.3	6
Proper attitudes toward study.....	16	61.6	36.4	2.0	7
Making and keeping notes for reference..	7	60.4	38.7	.9	8
Class lectures.....	14	59.2	40.1	.7	9
Proper reading methods for comprehension	29	58.1	40.6	1.3	10
Preparing for and taking examinations...	13	57.0	42.5	.5	11
Outlining.....	17	55.4	43.1	1.5	12
Rate of reading.....	12	48.2	50.2	1.6	13
Word cues in analyzing class lectures....	16	44.3	42.2	13.5	14
Knowledge of important reference books...	9	40.5	44.9	14.6	15
Planning a time schedule.....	5	39.4	57.2	3.4	16

High-school Freshmen obviously have not the intellectual bases for determining which is a good or a poor attitude. If a good attitude is to be established, knowledge of its desirability must precede conviction and habitual practice. On the whole, the knowledge of effective study techniques which these pupils possess does not appear satisfactory. It still remains to be determined just how much knowledge a ninth-grade pupil should have on these topics.

In this experiment the control groups had more than the usual opportunity to increase their knowledge because they sat next to, conferred with, and fraternized in classes with, pupils who were being given the special instruction. Table 3 contains data to show that both control groups increased their mean scores. However, the gain of the average control group over its initial score was not significant statistically, while that of the superior control group was definitely signifi-

cant. This finding is illuminating because it demonstrates that pupils of higher intelligence can be expected to acquire knowledge of good study habits as a by-product of regular subject classes, while the less intelligent will not of themselves learn the improved methods of studying.

As compared with the increases of the control groups, those of the experi-

scores than the pupils with average general aptitude. The mean score of the superior group was 141, compared with 127 for the average group. The coefficient of correlation between the initial scores on the Knowledge of Study Skills Test and the intelligence quotients obtained on the Otis Self-administering Tests of Mental Ability, Higher Examination, Form A, was

TABLE 3
EFFECTS OF HOW-TO-STUDY COURSE ON KNOWLEDGE OF GOOD STUDY HABITS

GROUP	INITIAL SCORE		FINAL SCORE		GAIN IN SCORES	Diff. SE. diff.
	Mean	Standard Deviation	Mean	Standard Deviation		
Superior:						
Experimental . . .	142.88	12.16	164.06	14.22	21.18	14.51
Control	139.65	15.31	148.96	13.55	9.31	6.42
Difference	3.23	.....	15.10	.....	11.87	6.45*
Average:						
Experimental . . .	127.89	13.71	146.67	12.27	18.78	9.83
Control	126.67	13.96	129.44	15.11	2.77	1.62
Difference	1.22	.....	17.23	.....	16.01	6.51*

* Computed by formula in Mordecai Ezekiel, "Student's t Method for Measuring the Significance of a Difference between Matched Groups," *Journal of Educational Psychology*, XXIII (September, 1932), 446-50.

mental groups were significantly greater. The critical ratios of the differences between the mean gains for the superior and the average experimental groups over their matched groups were 6.45 and 6.51, respectively. These figures indicate that the how-to-study instruction had substantial, positive, and direct effects by increasing the knowledge of good study skills possessed by those pupils who took the course.

Moreover, the pupils with higher mental ability made better initial

found to be .55, with a standard error of .05. One would logically expect pupils of higher intelligence to possess more knowledge of efficient study techniques, and the correlation verifies this expectation experimentally. It is interesting to note that the correlation was in the same range as those obtained between intelligence and achievement in standard academic subjects.

To determine the pupils' reaction to the course, an opinion-value questionnaire was submitted to them. To each

of the twelve topics covered in the course, they were asked to give a rating of "none," "little," "much," or "very much," according to its value in assisting them "to study better, to get a better grasp of the work, and to be-

theme, or report," "Increasing comprehension in reading and mastery of the reading assignment," and "Increasing speed of reading" were rated least helpful by the students.

It is difficult to interpret satisfactorily these observed results. The reliability of this questionnaire was not determined, and the differences in mean ratings are sometimes very slight in comparison with the standard deviation of the distribution of ratings. Taking the mean of all the scale ratings gives a total average of 6.2; that is, the pupils believed the course to be a little better than midway between "little" and "much" in value. The individual opinions on every topic ranged from one extreme to the other. Some of the pupils rated particular units in the course as of little or no value to them, while other pupils in the same class considered the same units of very much value. It would be erroneous to conclude, without further investigation, that a pupil who believed that he had received no benefit actually did not receive some, or that he knew the study skills beforehand, or that the teaching method was unsatisfactory.

The difficulty of interpreting the results of this questionnaire with certainty suggests that a number of steps are necessary before appreciable scientific advancement is made in the educational task of teaching students the best methods of study. These needs include the development of objective measures of proficiency in the use of study skills and the administration of

TABLE 4

PUPILS' OPINION OF VALUE OF SUGGESTIONS
COVERED UNDER VARIOUS TOPICS IN
HOW-TO-STUDY COURSE

Topic	Rank	Mean Scale Value*	Stand- ard Devia- tion
Preparing for and taking examinations.....	1	7.74	2.35
Reviewing.....	2	6.92	2.50
Aids to concentration.....	3	6.91	2.31
Increasing one's vocabulary.....	4	6.80	2.65
Keeping notebooks: note-taking and notations in books.....	5	6.49	2.50
Memorizing and remembering.....	6	6.28	2.23
Outlining.....	7	6.08	2.87
Importance of motives and good attitudes.....	8	6.00	2.72
Increasing speed of reading.....	9	5.77	2.89
Increasing comprehension in reading and mastery of the reading assignment.....	10	5.71	2.70
Preparing a term paper, theme, or report.....	11	4.87	2.74
Planning a time schedule.....	12	4.47	3.12

* The following scale values were assigned to the ratings: "none," 0; "little," 4; "much," 8; and "very much," 10.

come a better balanced student." The results presented in Table 4 reveal that the pupils were most appreciative of the suggestions on "Preparing for and taking examinations" and then, in order, "Reviewing," "Aids to concentration," and "Increasing one's vocabulary." The units on "Planning a time schedule," "Preparing a term paper,

these objective tests to derive norms for various grade levels. In the light of such norms, standards of satisfactory proficiency in the knowledge and the use of effective study skills could be formulated.

CONCLUSIONS

1. Ninth-grade pupils do not seem to possess satisfactory knowledge of effective study skills. Without an intelligent understanding of such techniques, they can hardly be expected to use their time and efforts in study to the best advantage. Much of the reason for their use of inefficient study methods can be ascribed to a lack of knowledge and understanding of effective study methods. In a Knowledge of Study Skills Test, the students answered correctly only 60 per cent of the 224 items.

2. Students of average mental ability made no significant gain in knowledge of effective study techniques when taught in regular subject-matter classes. A positive, planned effort

must be made to increase their knowledge.

3. Students of superior mental ability know more about efficient study techniques than do students of average ability.

4. The how-to-study course as taught in this experiment can be expected to increase substantially the knowledge of good study skills which is possessed by ninth-grade pupils.

5. The pupils believed that they had received benefit from the course in an amount better than midway between "little" and "much." Pupils differed a great deal among themselves on the value of each unit in the course. Opinions of the value of the same topic varied from "none" to "very much" between different pupils in the same class. However, the results of such a questionnaire cannot be considered to have objective validity. Objective methods, such as those used in the first part of this experiment, are much superior and are needed in determining the value of a how-to-study course.

A TEST OF TESTS

LOUIS FOLEY

Western Michigan College, Kalamazoo, Michigan

*

IN MOST educational circles today standardized "objective" tests are apparently accepted as reliable means of finding out a pupil's ability or preparation in a given subject. The usefulness of such a scheme of testing is indeed obvious. Perhaps, however, it may be better adapted to some subjects than to others. At any rate, there is room for doubt as to the validity of some of the English tests which are now available and which appear to have been rather widely used.

While it may be admitted that in a large, general way they will serve to separate the sheep from the goats, they tend to become less reliable as soon as one searches for any shading of differentiation. This fact was recently brought to the writer's attention by the results of tests administered to a group of pupils, most of whom happened to be more mature than the average. Since the test results did not match at all with evidence which the individual pupils gave in other ways, it was only natural to wonder why. When the test was carefully examined in detail, it became clear that a number of the items were so constituted as to put the more intelligent pupil at a disadvantage. For the very reason that he understood the subject better than would the average

pupil, he was more likely to give "wrong" answers and to come out with a lower score.

The reason for this paradox can be shown by a partial analysis of one of the tests employed on that occasion. This test is chosen for the purpose, not because it is worse than others, but because its relative simplicity makes it easier to use in this demonstration.

Part I of the test comprises eighteen items, each of which offers the student a choice of three terms for describing the example given. In Part II, likewise composed of eighteen items, no such hints are given, but only blanks in which to write the grammatical terms describing the construction of nouns or pronouns printed in capital letters. For some presumably "technical" reason, which is not revealed to us, the score for Part I is the number of right answers minus half the number of wrong responses, whereas the score for Part II is simply the number of right answers.

In most of the items in these two parts, as indeed throughout the test as a whole, the situation is simple, clear, and indisputable. Obviously any pupil who fails to make a passing score is grossly ignorant of the very rudiments of grammatical construction. One feels rather chagrined at the

thought that an easy familiarity with such matters is evidently not something to be taken for granted in pupils even before they enter *secondary* school.

The characteristic weakness of this test, however, as of others of the sort, lies precisely in the comparatively few items which ought to give the more intelligent pupil a chance to show his superiority. While it is usually easy enough to see which answer one is "supposed" to give in each case, the "right" answer has a way of happening to be a response which the more thoughtful person finds annoyingly unsatisfactory.

To some extent the true cause of the confusion is the use of terminology which is unfortunate. Insofar as grammar is worth bothering about at all, it is essentially a matter of logic, of orderliness, of straight thinking. It becomes unreal and is no longer helpful when things are called by illogical names. An example of this confused terminology is the expression "objective predicate." Now, in any sentence the *predicate* is whatever is said about the subject and, of course, includes the verb. The more one respects the meanings of words, the less clear becomes the term "*objective predicate*." What it might seem to come as near signifying as anything else is a transitive verb with its object and accompanying modifiers. It is used here, however, in application to what used to be called an "objective complement," as:

They called him their LEADER.

A worse example of loose terminology is the expression "retained object." It is explained that this phrase means "a complement following a passive verb." The expression is, in fact, contradictory. When a verb becomes passive, the former direct object becomes the *subject*, while the former subject is ordinarily relegated to the position of object of "by":

The dog bit the man.

The man was bitten by the dog.

If an object is "retained" after a passive verb, it can no longer be an *object*, for a verb simply cannot have an object unless it is an active verb.

However inept, the expression might be understandable as a makeshift way of describing what becomes of an *objective complement* when the verb is made passive:

He was called their leader.

Yet the real situation here is that of a copulative verb with predicate nominative; the statement now represents a variant of the idea that he *was* their leader.

This terminology is rendered still more objectionable by the nature of the examples, the "right" classification of which is that of "retained object":

He was given a PRIZE for high scholarship.

Here we were shown a beautiful VIEW.

He was given a FELLOWSHIP at Harvard.

Alice was given a WATCH for a graduation present.

These are not very good examples for any purpose, unless for a study of linguistic pathology. Yet they are not presented as sentences in need of cor-

rection or improvement; the test treats them as being perfectly all right. No doubt one could find impressive "authorities" who would excuse their incoherence as "justified by usage." But if grammar is to function as discipline in accurate thinking, why not seize upon such glaring examples to demonstrate what the thing is all about, and let the chips fall where they may? Common sense will, of course, tell anyone that not "he" but the "prize" was "given" and that it was given *to him*. If Alice's fond parents gave her a watch, then the turning of the statement into the passive must logically produce:

A watch was given to Alice . . .

The fact that such would-be sentences as these could ever exist at all is amusing evidence of how people, without thought, follow set patterns. In the freer word-order of an earlier day, sentences commonly began with a dative of indirect object, as:

(To) Him that hath shall be given.

Perhaps as a result of too much reading of mere words on paper, and a loss of feeling for living speech, many people nowadays are apparently baffled by any sentence which does not begin with the subject. Logically, however, "Him and me went," in which the objective is wrongly used for the nominative, is no worse than "He was given a prize," where the mistake goes the other way around.

Should a high-school pupil be expected to be aware of these details of historical grammar? Perhaps not,

though surely they may be comprehended without any great mental strain. But if the pupil is not supposed to think the construction through, to analyze the combination of its elements, then why bring the matter up at all? As the examples stand, they reward the "good" pupil who has learned the conventional rules of thumb and knows how to put sentence elements into arbitrary, mechanical pigeonholes, while they place the more thoughtful youth at a disadvantage. The mere assumption that pupils of the latter sort are comparatively rare is hardly a valid excuse for ignoring them altogether.

The question of proper terminology comes up in other places besides those already noticed. To be sure, grammatical nomenclature in English is a rather muddled affair, and textbooks have differed considerably in their use of terms, but it still seems possible to remain on safe ground. As a rule, the adoption of Latin classifications is not particularly helpful. A case in point is the name "gerund." In Latin the term is chiefly useful to mark a difference from the *gerundive*—a curious construction which English does not possess at all. Why not say simply "verbal noun"? The latter expression is, perforce, employed by the dictionary in defining "gerund." In fact, the dictionary definition of a "gerund" in *English* limits the term to a verbal noun "when used distinctly as part of verb," as when it either takes an object or has adverbial modifiers. Thus, according to strict definition, certain

of the items in this test for which the "right" category is "gerund" are not really such, as, for instance:

Walking and riding are healthful exercises.

Naturally this distinction will puzzle only the most discriminating students, but why penalize them? The term "verbal noun" is not only simpler and more inclusive but more exact; it would have left no room for doubt or argument.

To notice another instance of needlessly cumbersome phraseology, consider the term "transitive passive." If a pupil knows what a transitive verb is, then he knows that it is the only kind that can be turned into the passive form, whereas the redundant expression might be taken to imply that there could be some other kind of passive voice. As a good test problem, however, to indicate a pupil's understanding of voice in verbs, we might suggest such a specimen as:

His race is run.

Here the student will have to recognize that "run," while ordinarily intransitive, becomes a transitive verb in "to run a race," just as does "live" in "to live a life," or "die" in "to die the death."

In Part VII of the test being analyzed, the pupil is asked to indicate the term which classifies the mood of "the verb or verbs" in each of six sentences. For two of the six, the "right" answer is "subjunctive":

What would you do if you were he?
I wish I were at home today.

In each case the subjunctive appears only in the subordinate clause, the main clause being in the indicative. Logically, in any sentence the verb of the main clause is "*the verb.*" At least in the first of these two specimens, it seems such in fact as well as in theory, and the question would be abundantly clear if it were stated:

What would *you* do?

Naturally the student whose familiarity with grammar leads him thus far will give a "wrong" answer.

Moreover, it will be observed that both these examples of the subjunctive are of the same sort—a peculiar use of the subjunctive which some grammarians consider not especially important. Why not test the pupil's comprehension of other situations where the subjunctive is indispensable?

The doctor advised that she *go* to the hospital.

It is necessary that we *be* prepared.

Come what may, we will do our best.

Devil *take* him, I can't help him now.

Perhaps it might also be well to test the pupil's recognition of a subjunctive where (as nearly always in the *plural*) it has the same form as the indicative:

Beware this night, that you *cross* not my path.

The foregoing sentence, quoted from Part VIII of the test, asks only for the classification of the imperative "beware" and takes no account of the other verb.

More serious, however, is the fact

that in this same Part VIII the score card indicates "subjunctive" as the "right" disposition of two items which are not such at all:

If it RAINS, I shall not go.

If you ARE CHOSEN, it will be a great honor.

If, as in the English of our ancestors, the subjunctive were used here, the words would have to be "rain" and "be chosen."

Part XIII calls on the pupil to classify ten units either as "correct sentences" or as statements involving one of several "types" of error in sentence structure. According to the official score card, the "right" disposition of two of the ten is to indicate them as "rambling":

His daughter, Julia, charming as a conversationalist, graceful as a dancer, and but recently graduated from the university, added much to our enjoyment of the evening.

In the firm desire to preserve liberty, and in the determination that the republic shall stand and with a realization of our act, we offer our services to our country.

No doubt, as a matter of literary style, these two sentences could be improved. It might be more sensible to dispose first of the rather noncommittal fact of Julia's recent graduation and then proceed climactically with the more relevant points of her definite social accomplishments. In the second "unit," omission of the first "and" and a comma after "stand" would make the construction clearer and easier to grasp.

One can readily understand that

such sentences should seem boresome reading to the extrovert pupil accustomed only to more hectic rhythms of expression. Their leisurely and dignified pace will probably strike the present-day reader as quaint or old-fashioned. "Rambling," however, they certainly are not. On the contrary, they are clear examples of the periodic sentence, which, though it may take its time, is marching steadily toward a preconceived end that is kept in mind from the start. Aside from minor defects, they represent a manner of writing which most pupils might well learn how to use oftener than they do. Nevertheless, the student who is intelligent enough to appreciate these sentences and who marks them "correct," as they essentially are, will receive a lower score than that of a student whose superficial snap judgment disposes of them as "rambling."

Lest it appear that a particular test is invidiously singled out, another in which more or less similar weaknesses are to be found will be discussed. In a test designed "for high schools and colleges," one which has been widely used, there are a number of questions which have to be taken rather superficially in order to arrive at the "correct" answer.

Two of the items in one part of the test are handled rather arbitrarily, to say the least. The student is asked to indicate whether each of the six expressions in this group "should be written as one sentence" or should be written as two sentences. The fifth item of the group is as follows:

"That could not have happened," replied Andrews, "you know the conditions of the weather would have prevented it."

According to the key by which the test is to be scored, the correct answer is that this example should be written as *two* sentences. It is certainly true that the expression as it stands is an example of the "comma splice" or "illiterate comma," for it contains two grammatically independent predications. Yet this fault could be satisfactorily cured by placing a semicolon instead of a comma after "Andrews." In fact, it is in just this sort of place that a semicolon is regularly used. The semicolon is a convenient mark of punctuation to indicate that two statements, though grammatically independent, are so closely connected in thought that they constitute really only one sentence. Again, it often happens that the best way to cure a "comma splice" is to reconstruct the expression so that it is grammatically unified. In other words, one may well decide that it *ought to have been* one sentence. Thus, subordinating one of the clauses by inserting a conjunction which shows its exact relationship to the main clause, we might revise this example to read:

"That could not have happened," replied Andrews, "*because*, you know, the conditions of the weather would have prevented it."

There is certainly some justification, then, for saying that this expression "*should be written as one sentence*," the key to the contrary notwithstanding.

The sixth item, which the key likewise disposes of as *two* sentences, is as follows:

This is final, you may choose one course or the other at once.

Here again we have two clauses which are not connected by any grammatical construction. Would it not be permissible, however, to separate them by a colon, a semicolon, or a dash, and, with such punctuation, to write them as *one* sentence? Indeed, one might well prefer such a solution to that of placing a period between them, for the latter arrangement might make one wonder why the two sentences were next to each other. If, as we may reasonably assume, this expression is intended as an example of a sort of composition which one meets in real life, the fault is precisely a lack of unified structure, and it "*should be written as one sentence*," though its careless author has not taken the trouble to write it so. The idea which is really intended is probably something like this:

The final answer is that you may choose one course or the other at once.

Thus, as these two items are handled in the test and in the key, the student must be rather crude and superficial in his disposition of them in order to arrive at the only "correct" answer, and the more intelligent student is at a positive disadvantage. Yet these two items constitute exactly one-third of the group in which they occur.

Another group comprises eight sentences concerning which the student is informed by the heading that "some

... are faulty, and some are correct." The first, which the key says is correct, reads as follows:

Water passes through cement as well as through brick.

Anyone who knows the textbooks will readily understand why this sentence is "correct." It is a typical "right" form of the kind used in handbooks, in connection with parallel structure, as a correction of the faulty parallelism in such a sentence as:

Water passes through cement as well as brick.

The "correct" sentence in the test remains ambiguous, however, though in a different way. It may have either of two meanings:

Water passes through cement and also through brick.

Water passes with equal facility [or difficulty] through cement and through brick.

Possibly both of these statements may be true, but it is certainly not at all likely that both were intended. The student who perceives this ambiguity will, of course, mark the sentence "faulty," for it *is* faulty, but he will be penalized for doing so.

The next group presents six expressions, some of which, the heading says, "are not properly one sentence as they stand." The fifth of these, which, according to the key, is *two* sentences, reads:

Uncle Fred wants you to come, too, can't you?

Like the two items already noticed, this statement provides an example of

the "comma splice" between grammatically independent clauses. To say that it must be written as two sentences, however, is somewhat arbitrary, for it would be no breach of propriety to employ either a semicolon or a dash after "too." One can hardly imagine this expression being used anywhere but in a friendly letter, and probably most of those (few) letter-writers who punctuate carefully and correctly would use a dash and make it one sentence.

The items in this group would be easier to handle with finality if it were not for the word "properly" in the accompanying directions. Consider, for example, the fourth:

After I had eaten a dish of the cereal, the landlady surprised me by bringing in some fresh toast and two soft-boiled eggs, which she set down beside my plate with such a cordial smile and morning greeting that I really felt quite embarrassed on account of the extra trouble I had made; but my embarrassment did not prevent me from eating a hearty breakfast, thanking her for her kindness, and following my thanks with a promise not to be late again for breakfast—at least, not soon.

According to the key, this expression is "properly one sentence." One sentence it certainly is, but whether it is "properly" so is a question about which there may be some difference of opinion. Does the author of the test mean, by any chance, that this is a *good* sentence? If so, then it illustrates fairly well an ideal of sentence structure which was widely prevalent in the early nineteenth century and which still hangs on in "newspaper style,"

namely, that a sentence is a good one if it can somehow be parsed. Surely no thoughtful person would pretend that the writer of this sentence knew where it was going when he began it or that he remembered at the end just what it was that he had started out to say. It exhibits sufficient verbal dexterity to avoid incoherence, but it is weak in structure because it is not built on an intelligent plan. In fact, this item would do very well, as an example *for correction*, in a test on sentence structure.

The sixth item, similarly classified in the key, is:

Coming to the little stream about six o'clock, we followed it down till it crossed the main trail, which we easily reached before darkness overtook us.

Here the "grammatical ideal" is exemplified on a smaller scale; the construction is quite makeshift. The relative clause modifies "trail" grammatically, but it does not modify that word so far as the thought is concerned. Instead of limiting or describing the noun to which it is attached, the adjective clause merely affords a means of somehow tacking on an afterthought which was not foreseen and provided for by the sentence structure. Like the preceding item, this sentence would find its proper place in a list of faulty sentences for correction.

The key informs us that the following sentence is "not a correct sentence in harmony with present-day good usage":

They always have to do nights what they neglected to do days.

The reason why the sentence is "faulty" is of course that it employs the words "nights" and "days." The worst objection that could possibly be urged against these expressions, however, would be that they are obsolete or obsolescent, and the fact that they are still to be found in fairly common use indicates that they are not so. They are neither ungrammatical nor unnatural; they are survivals of the old adverbial use of the genitive case, exactly the same construction that we have in "It must *needs* be"; in "once," "twice," and "thrice"; in a number of other common words; and (disguised by translation into a prepositional phrase) in such expressions as "of late" or "of course." The objection to them which is made by some strict grammarians rests on the mistaken notion that they are plurals.¹ There is surely no justification for putting them down as "key" errors.

In Part VIII of the test, comprising "miscellaneous faulty expressions," one of the "faulty" sentences is:

I do not know if I have all these right or not.

The "fault" is undoubtedly that the writer used "if" instead of "whether." Yet this use of "if" is thoroughly established in the language, and there is no clear reason why it should be considered objectionable. It is given as one of the regular uses of the word in the *Century Dictionary and Cyclopaedia*,

¹ See, for instance: James B. Greenough and George Lyman Kittredge, *Words and Their Ways in English Speech*, p. 196. New York: Macmillan Co., 1901.

without any unfavorable comment, and the accompanying examples which illustrate this use are drawn from the writings of Walpole, Tennyson, Lowell, and Matthew Arnold. One may prefer to use "whether" in this sentence, but it is certainly arbitrary to stigmatize "if" as "incorrect."

It seems hardly necessary to cite further examples. They are not especially hard to find in various other tests which might be examined. Naturally we should not expect to find many weak spots of this sort in those tests which are intended only for very elementary levels. No doubt the specimens which have been considered will function well enough in merely weeding out the grossly ignorant or the indiscriminating. The point is, however, that they tend to become distinctly less reliable when it is desired to classify students on the higher levels. In order to be "scientific," any scheme of measurement must be accurate in marking off degrees.

Surely it is an abuse of technical terms to call such a test "diagnostic." True diagnosis is not merely a matter of establishing that *something* is wrong but is rather a matter of finding out just *what* is not as it should be. That is a problem not to be very satisfactorily solved by such naively mechanical means. Often it happens that the important point is not so much the mere fact that the pupil fails to arrive at the correct answer as the question of just *how* he goes astray.

The principle can be easily seen in

its application to that perennial bugbear of all language teachers—spelling. The traditional spelling test rests on a purely mathematical basis: the childish assumption that words are units of equal importance. It is taken for granted that knowing how to spell one word is of the same value as knowing how to spell any other. Nothing could be more unrealistic than such a notion. The dictionary contains many words of which a well-educated person can be ignorant without shame. Sometimes a misspelling might even indicate superior intelligence. On the other hand, the misspelling of many kinds of words is unmistakable evidence of habitual mispronunciation, gross errors of grammar, or illiterate confusion of very different words. Not the mere fact but the *manner* of misspelling is what tells the tale.

Most language teachers will welcome "objective" tests insofar as they can really be made objective and insofar as they give any reliable information as to a pupil's attainments in that very *subjective* thing that all language is by its very nature.

Probably some of the faults pointed out in this analysis could be cured by more thoughtful effort in the preparation of tests. It hardly seems likely, however, that we can ever arrive at a form of language test which will be as truly "scientific," as reliably accurate, as generally useful as the analogous procedures which appear to yield reasonably dependable results in some other fields.

SELECTED REFERENCES ON STATISTICS, THE THEORY OF TEST CONSTRUCTION, AND FACTOR ANALYSIS

FRANCES SWINEFORD AND KARL J. HOLZINGER
University of Chicago

*

THE following bibliography, with a few exceptions, has been selected from issues of educational and psychological journals from April, 1942, to March, 1943, inclusive. Sharp distinctions do not exist between the fields covered in this list, but, as an assistance to the student with special interests in one or more of the fields, the references have been classified under the following categories: theory and use of statistical methods, problems of test construction, and factor analysis. No articles dealing primarily with the use of tests have been included because these items are distributed functionally in other lists in the cycle, such as those dealing with secondary-school instruction, guidance, etc.

THEORY AND USE OF STATISTICAL METHODS¹

363. BLOOM, BENJAMIN S., and LUBIN, ARDIE. "Use of the Test Scoring Machine and the Graphic Item Counter for Statistical Work," *Psychometrika*, VII (December, 1942), 233-41.

¹ See also Item 341 (Jackson and Ferguson) in the list of selected references appearing in the June, 1942, number of the *Elementary School Journal*.

Explains the operation of the graphic item counter, a special device for the test-scoring machine, and presents instructions for its use in obtaining the necessary sums for computing the Pearson product-moment correlation coefficient.

364. BUTLER, JOHN M. "A Ratio for Estimating the Reliability of Test Scores," *Journal of Educational Psychology*, XXXIII (May, 1942), 391-95.

Suggests a ratio to be used in interpreting individual test scores and in comparing samples with differing ranges of talent.

365. DuBOIS, PHILIP H. "A Note on the Computation of Biserial r in Item Validation," *Psychometrika*, VII (June, 1942), 143-46.

Describes the use of punch-card tabulating equipment for rapid calculation of biserial correlations when a large number of such correlations is desired.

366. GREENE, EDWARD B. "An Analysis of Random and Systematic Changes with Practice," *Psychometrika*, VIII (March, 1943), 37-52.

Makes use of subjective reports, changes in means and variabilities, and factor analyses of several administrations of twelve tests to the same subjects in order to study the assumptions underlying the formulas for correction for attenuation.

367. GUILFORD, J. P., and LYONS, THOBURN C. "On Determining the Reliability

and Significance of a Tetrachoric Coefficient of Correlation," *Psychometrika*, VII (December, 1942), 243-49.

Presents tables to aid in the calculation of the standard error of tetrachoric r , as well as tables of tetrachoric r significant at the 5 per cent and the 1 per cent levels under various conditions.

368. HORN, DANIEL. "A Correction for the Effect of Tied Ranks on the Value of the Rank Difference Correlation Coefficient," *Journal of Educational Psychology*, XXXIII (December, 1942), 686-90.

Suggests a simple correction to be applied to the formula for the correlation of ranks in case there are tied ranks.

369. JACKSON, ROBERT W. B. "Note on the Relationship between Internal Consistency and Test-Retest Estimates of the Reliability of a Test," *Psychometrika*, VII (September, 1942), 157-64.

Uses the method of analysis of variance "to determine empirically the relationship between the 'internal consistency' and the 'test-retest' estimates of the reliability of a test."

370. JOHNSON, H. G. "Does the Gifted Child Have a Low AQ?" *Journal of Educational Research*, XXXVI (October, 1942), 91-99.

Explains the negative correlation usually found between achievement quotient and intelligence quotient.

371. JOHNSON, H. M. "Humm's Non-linear Product-Moment Correlation"; HUMM, DONCASTER G. "A Reply to Johnson's Criticism"; JOHNSON, H. M. "A Rejoinder to Humm," *American Journal of Psychology*, LVI (January, 1943), 111-20.

A discussion of Humm's procedure for correcting curvilinear regression lines to rectilinear lines. (See Item 404 [Humm] in the list of selected references appearing in the June, 1942, issue of the *School Review*.)

372. KELLEY, TRUMAN L. "The Reliability Coefficient," *Psychometrika*, VII (June, 1942), 75-83.

Investigates certain special properties of the reliability coefficient and discusses certain assumptions on which it is based.

373. KENDALL, M. G. "Partial Rank Correlation," *Biometrika*, XXXII (April, 1942), 277-83.

Presents a method of determining partial correlation from ranks.

374. KOENKER, ROBERT H., and HANSEN, CARL W. "Steps for the Application of the Johnson-Neyman Technique—A Sample Analysis," *Journal of Experimental Education*, X (March, 1942), 164-73.

A numerical example which illustrates the technique for "testing the statistical significance of the best estimate of the difference in achievement between two groups, when the two groups are matched statistically on two basic characters."

375. MERRINGTON, MAXINE. "Table of Percentage Points of the t -Distribution," *Biometrika*, XXXII (April, 1942), 300.

Presents a table of values of t not previously available. The values are computed to five significant figures for P equal to 50, 25, 10, 5, 2.5, 1, and 0.5.

376. PEATMAN, JOHN GRAY, and SCHAFER, ROY. "A Table of Random Numbers from Selective Service Numbers," *Journal of Psychology*, XIV (October, 1942), 295-305.

Presents a short table of random numbers, describes how it was obtained, tests it for randomness, and illustrates its use.

377. SUMNER, F. C., and DEHANEY, KENNETH G. "Size and Placement of Intervals as Influencing a Pearson Product-Moment Correlation Coefficient Obtained by the Scatter-Diagram Procedure," *Journal of Psychology*, XV (January, 1943), 27-30.

Presents results of the grouping of data for one hundred cases in a number of different ways to show the effect of grouping on the correlation coefficient.

378. TAYLOR, WILLIAM STEPHENS. "Partialling Out Sums of Squares and Products in Calculating Correlations with Nonhomogeneous Data," *British Journal of Psychology*, XXXII (April, 1942), 318-23.
Describes a method of eliminating the correlation between groups from coefficients based on nonhomogeneous populations.
379. THORNDIKE, ROBERT L. "Regression Fallacies in the Matched Groups Experiment," *Psychometrika*, VII (June, 1942), 85-102.
Discusses sources of error in the use of matched groups which are drawn from dissimilar populations.
380. TRELOAR, ALAN E. "Correlation Analysis." Minneapolis, Minnesota: Burgess Publishing Co., 1942. Pp. 64 (mimeographed).
Outlines a course in correlation analysis which covers correlation of sums and differences, partial and multiple correlation, nonlinear correlation, contingency, biserial r , and correlation between ranks.
381. TSAO, FEL. "Tests of Statistical Hypotheses in the Case of Unequal or Disproportionate Numbers of Observations in the Subclasses," *Psychometrika*, VII (September, 1942), 195-212.
Gives some general equations for the analysis of variance method when there are (1) equal numbers of observations in the subclasses and (2) unequal numbers of observations in the subclasses.
383. BLOOM, BENJAMIN S. "Test Reliability for What?" *Journal of Educational Psychology*, XXXIII (October, 1942), 517-26.
Indicates the extent to which tests with low reliability coefficients can be used for making generalizations concerning student behavior.
384. CRONBACH, LEE J. "Studies of Acquiescence as a Factor in the True-false Test," *Journal of Educational Psychology*, XXXIII (September, 1942), 401-15.
Analyzes the responses to the true items and to the false items of a number of tests and estimates the relative validity and reliability of two types of items in order to test the hypothesis that the trait of acquiescence unduly affects test scores.
385. EDGERTON, HAROLD A., and THOMSON, KENNETH F. "Test Scores Examined with the Lexis Ratio," *Psychometrika*, VII (December, 1942), 281-88.
Discusses a ratio indicating "the extent to which interindividual variation operates as a source of the variance," and relates this ratio to the Kuder-Richardson formula for the reliability coefficient.
386. ENGELHART, MAX D. "Unique Types of Achievement Test Exercises," *Psychometrika*, VII (June, 1942), 103-15.
Presents a number of unusual achievement-test exercises of both the essay and the objective types.
387. FULCHER, JOHN S., and ZUBIN, JOSEPH. "The Item Analyzer: A Mechanical Device for Treating the Four-fold Table in Large Samples," *Journal of Applied Psychology*, XXVI (August, 1942), 511-22.
Describes an instrument, which can be inexpensively constructed, to determine approximately the differentiating ability of an item. The instrument should be used only with large samples.
388. GARLOUGH, L. N. "A Convenient Method for Calculating Indices of Ease

PROBLEMS OF TEST CONSTRUCTION

382. BAXTER, BRENT. "On the Equivalence of Time-Limit and Work-Limit Methods," *American Journal of Psychology*, LV (July, 1942), 407-11.
Questions the equivalence of time-limit and work-limit scores on tests involving speed.

and of Differentiating Ability for Individual Test Questions," *Journal of Educational Research*, XXXV (April, 1942), 611-17.

Describes a technique for calculating indices of ease and of differentiating ability of test items from percentages of correct responses in consecutive fifths of a group divided on the basis of total test score.

389. GHISELLI, EDWIN E. "Estimating the Minimal Reliability of a Total Test from the Intercorrelations among, and the Standard Deviations of, the Component Parts," *Journal of Applied Psychology*, XXVI (June, 1942), 332-37.

Derives and illustrates a method for estimating the lowest possible reliability coefficient of a test so constructed that ordinary methods of computing reliability are not feasible.

390. GIFFEN, LOWELL L. "An Improved Method for Scoring the Pressey X-O Test," *Journal of Applied Psychology*, XXVI (December, 1942), 841-45.

Suggests a change in the arrangement of the words in the Pressey X-O Test to simplify the scoring. The principle is a general one which could be applied to other types of tests.

391. JOHNSON, H. M. "General Rules for Predicting the Selectivity of a Test," *American Journal of Psychology*, LV (July, 1942), 436-42.

Discusses the question of the number of instances of proper classification gained by the use of a test over the number obtained by guessing only.

392. JONES, WILLIAM J. "Testing the Utility of Tests," *Education*, LXIII (November, 1942), 174-84.

A general discussion of validity, reliability, objectivity, practicability, and "utility" of tests.

393. KORAN, SIDNEY W. "Machines in Civil Service Testing," *Educational and Psychological Measurement*, II (April, 1942), 167-200.

"This article comprises a description of the purpose, design, and operation of the I.B.M. scoring machine, a discussion of the limitations of the scoring machine in connection with the conduct of examinations, information on adapting tests to machine scoring, descriptions of procedures for scoring tests using the I.B.M. and other machines, information on scoring various types of rating scales by machine, material on the uses of the scoring machine in item analysis and in the computation of several statistical measures, and a summary of the place of tabulating equipment in the conduct of certain examination tasks."

394. LAWSHE, C. H., JR. "A Nomograph for Estimating the Validity of Test Items," *Journal of Applied Psychology*, XXVI (December, 1942), 846-49.

Presents a nomograph for determining the validity of test items by the "Kelley technique," which involves percentages of correct responses by "high" and "low" criterion groups.

395. MCQUITTY, JOHN V. "Procedures for Handling Tests and Examinations," *Educational and Psychological Measurement*, II (April, 1942), 153-66.

A detailed account of the testing procedure employed by the Board of University Examiners of the University of Florida.

396. MORRISON, ALEXANDER W. "A Graphical Device for Comparing the Form of a Given Distribution of Test Scores with the Form of the Standard Distribution for the Test," *Journal of Educational Research*, XXXVI (November, 1942), 218-20.

Presents a nontechnical explanation of the differences in the distribution of test scores for two groups of subjects.

397. REMMERS, H. H., and ADKINS, R. M. "Reliability of Multiple-Choice Measuring Instruments, a Function of the Spearman-Brown Prophecy Formula. VI," *Journal of Educational Psychology*, XXXIII (May, 1942), 385-90.

The sixth of a series of experiments. Tests the applicability of the Spearman-Brown prophecy formula to items composed of two to five choices based on standardized algebra tests. (See also Items 427 [Denney and Remmers] and 436 [Remmers, Karlslake, and Gage] in the list of selected references appearing in the June, 1941, number of the *School Review* and Items 439 [Remmers and Ewart], 440 [Remmers and House], and 441 [Remmers and Sageser] in the June, 1942, number of the same journal.)

398. ROSANDER, A. C. "A Simple Method of Scoring and Interpreting Sequential Responses," *Journal of Educational Research*, XXXVI (November, 1942), 168-77.

Presents tables to aid in scoring the type of test question which requires the arrangement of a number of items in a certain order.

399. SEARLE, LLOYD V. "Scoring Formulae for a Modified Type of Multiple-Choice Question," *Journal of Applied Psychology*, XXVI (October, 1942), 702-10.

Discusses the construction and the scoring of that form of multiple-choice test in which the items contain varying numbers of correct alternatives.

400. SIMON, GEORGE B. "Procedure for Obtaining Six Part Scores from Answer Sheets in One Run through the IBM Test Scoring Machine," *Journal of Applied Psychology*, XXVI (October, 1942), 653-58.

Describes the way in which six different part scores may be obtained from one side of an answer sheet in a single run through the test-scoring machine, provided that each score is the number of right responses.

401. STUMP, N. FRANKLIN. "The Stump Auditory Group Tests of Intelligence," *Journal of Educational Psychology*, XXXIII (October, 1942), 495-505.

Describes a new type of intelligence test which is presented orally in order to eliminate reading ability from the responses.

Reliability and validity coefficients, age norms, and deciles are presented for two forms of the test.

402. THOMSON, GODFREY H. "Following Up Individual Items in a Group Intelligence Test," *British Journal of Psychology*, XXXII (April, 1942), 310-17.

Illustrates a method of examining test items at successive school levels with a view to producing better prognostic tests.

403. TRAVERS, R. M. W. "A Note on the Value of Customary Measures of Item Validity," *Journal of Applied Psychology*, XXVI (October, 1942), 625-32.

Gives some data on the reliability of measures of item validity and discusses the advisability of keeping records of validity ratings in a permanent file of test items.

404. TRAXLER, ARTHUR E., and HILKERT, ROBERT N. "Effect of Type of Desk on Results of Machine-scored Tests," *School and Society*, LVI (September 26, 1942), 277-79.

Compares mean scores of groups working at desks and groups working on armchairs on tests having separate answer sheets.

405. WALLIN, RICHARD, and RIEVESCHL, GEORGE, JR. "An Improved Self-marking Answer Sheet," *Journal of Educational Psychology*, XXXIII (December, 1942), 702-4.

Describes a time-saving, self-marking answer sheet which does not require expensive equipment.

FACTOR ANALYSIS¹

406. BURT, CYRIL, and JOHN, ENID. "A Factorial Analysis of Terman Binet Tests, Parts I and II," *British Journal of Educational Psychology*, XII (June and November, 1942), 117-27, 156-61.

Analyzes the twelve tests allotted to ages ten and twelve from the Stanford revision. A homogeneous group of 483 cases was used. Presents and discusses two methods of factor analysis.

¹ See also Item 366 (Greene) in this list.

407. FERGUSON, LEONARD W., and LAWRENCE, WARREN R. "An Appraisal of the Validity of the Factor Loadings Employed in the Construction of the Primary Social Attitude Scales," *Psychometrika*, VII (June, 1942), 135-38. Compares the factor loadings obtained from one form only of each test with the factor loadings obtained from averages of groups of four corresponding correlations of two forms of each test.
408. HEESE, K. W. "A General Factor in Improvement with Practice," *Psychometrika*, VII (September, 1942), 213-23. A factor analysis of the results of ten trials on six tests given to fifty subjects, the purpose being to discover whether there exists a general factor of improvement.
409. HOLZINGER, KARL J. "Why Do People Factor?" *Psychometrika*, VII (September, 1942), 147-56. An elementary exposition of some of the basic principles of factor analysis, written expressly for the "factorial layman."
410. LAWLEY, D. N. "The Application of the Maximum Likelihood Method to Factor Analysis," *British Journal of Psychology*, XXXIII (January, 1943), 172-75. Gives an arithmetical example of a method of factor analysis. Includes also a method of determining the number of factors required.
411. MOFFIE, DANNIE J. "A Non-verbal Approach to the Thurstone Primary Mental Abilities," *Journal of General Psychology*, XXVII (July, 1942), 35-61. Describes an attempt to construct performance tests that will measure the Thurstone primary mental abilities.
412. PRIMOFF, ERNEST S. "Correlations and Factor Analysis of the Abilities of the Single Individual," *Journal of General Psychology*, XXVIII (January, 1943), 121-32. Develops an application of a method of factor analysis to relationships among an individual's scores on a number of tests.
413. REYBURN, H. A., and TAYLOR, J. G. "On the Interpretation of Common Factors: A Criticism and a Statement," *Psychometrika*, VIII (March, 1943), 53-64. The authors criticize the concept of simple structure and present their own method of rotating the reference axes from the centroid solution.
414. STUIT, DEWEY B., and HUDSON, HARRY H. "The Relation of Primary Mental Abilities to Scholastic Success in Professional Schools," *Journal of Experimental Education*, X (March, 1942), 179-82. Scores on the American Council on Education Tests for Primary Mental Abilities are compared with success in three professional schools.
415. WITTENBORN, JOHN RICHARD. "Factorial Equations for Tests of Attention," *Psychometrika*, VIII (March, 1943), 19-35. An investigation to determine whether there exists an "attention" factor. Includes descriptions of several new tests of attention and a factorial analysis of 20 tests administered to 175 cases.

Educational Writings

*

REVIEWS AND BOOK NOTES

SOLVING EVERYDAY PROBLEMS BY THE USE OF ART PRINCIPLES.—Contrary to the opinion prevalent among young people, art is not only for the favored few, those who can create beautiful sculpture or paintings; nor is the enjoyment of it limited to those who are highly trained in the appreciation of the great masterpieces of the world. There is yet another important phase of the subject which deals with problems encountered by every person who tries to improve his personality and make for himself and others a more attractive and satisfactory environment. As the title indicates, Bartlett and Crawford's book¹ presents the social and the practical aspects of art. The material is developed around the idea that in all art there are fundamental guiding principles which, if understood and properly used, will enable a person to improve his taste, to create harmony both within himself and in his surroundings, and to recognize a new world of visual forms of which he may have been unaware. The book is written at the secondary-school level, and it deals with that overlapping area of art appreciation which makes it equally suitable for use in art or in home-economics classes.

In the introductory chapter, "Are You Ready?" the student is told:

An art-appreciation classroom is a laboratory . . . where you learn to do things by doing them, to make things by making them, to arrange by arranging, and to improve your judgment by passing judgments and having those judgments checked and verified [p. 2].

¹ Francis Grant Bartlett and Claude C. Crawford, *Art for All: Art Appreciation as Related to Dress, Home, School, and Work*. Edited by Ray Faulkner. New York: Harper & Bros., 1942. Pp. xvi+272. \$2.40.

Recognizing the adolescent's heightened interest in himself, the authors appropriately begin with a discussion of the individual's own type and personality and the help that appropriate and becoming dress is to the acquisition of poise and the improvement of general appearance. The pupil is also initiated into the secrets of the art of directing attention to his best features and camouflaging his defects, either real or imaginary.

Next, the individual is encouraged to experiment with his purely personal environment, his own room. Later he becomes conscious of the needs and personalities of the entire family. Through the arrangement of furniture, he learns the value of "parking spaces" and "traffic ways" in an interior. Leaving the home, he turns to the school, where he learns about the use of art in school activities and means of making the building and grounds more attractive. He considers the power of art in the business world, as exemplified in attractive containers, orderly arrangements of merchandise, or eye-compelling window displays which lure the customer from the competitor across the street. Finally, the summary deals with the definition and the emotional effect of the art elements—line, dark and light, form, texture, etc.—and more specifically explains the operation of the principles of balance, rhythm, etc., which have already been introduced as need for them occurred. Owing to the broad scope of the subject matter, the information presented in this textbook is introductory in character and will be helpful to the average student.

The appearance of the book is attractive; the contents are well organized; and the numerous illustrations are, for the most part, exceptionally well chosen. Examples of su-

perior and inferior objects or compositions are juxtaposed in order to facilitate comparison, which is the learning technique frequently employed. In a few instances the ideas represented by drawings are slightly confusing even to the trained eye, and therefore these fall below the average high quality of the work. The merit of the book lies in the compilation and the excellent organization of material which has already appeared in various sources, in the spirited manner in which it is written, and in the up-to-date quality of the illustrations.

KATHRYN D. LEE

*Laboratory Schools
University of Chicago*

A WARTIME COURSE IN PHYSICAL SCIENCE.—War is having a tremendous effect on the teaching of the sciences in the high school. One wholesome effect—and let us hope a lasting effect—is the necessity for making some decisions on the basis of conditions that exist in the local community. For the consideration of those teachers and administrators who are not foolish enough to throw physics and chemistry out of the window in order to make room for pre-induction courses, and of those teachers who are not satisfied to mark time with the pre-war offerings in science, a one-year program in physical science¹ is offered by four California teachers. It is very evidently set up on the thesis that this war has shown a need for a knowledge of the physical features of this planet, Earth; that a more or less comprehensive knowledge of physics contributes to the pupil's preparation for a total war effort; and that some general facts about chemistry should be thrown in for good measure.

A few more than a hundred pages are devoted to a short unit on the "Sun and Stars" and a longer unit on "Earth Sciences." Unit III on "Physics That All Should Know"

comprises nearly three hundred pages and includes ten chapters, most of them similar to the usual units or sections in textbooks in physics. Fewer than a hundred pages are devoted to "Chemistry That All Should Know" under the four sections: "Our Chemical World," "Chemistry in the Machine Age," "Chemical Industries," and "Chemistry and Life."

The format of the book is excellent. The pages are seven and a half by nine and three-quarter inches in size and are printed in two columns. There are thirty-two full-page and more than a hundred half-page pictures. Most of the nearly three hundred line drawings and sketches are effectively and well done. The photographs are appropriately chosen and clear.

At the end of each section is a "Study Guide," which provides a few "what," "how," "why," "describe," and "explain" questions. Summary paragraphs, the number depending on the length of the chapter, restate the essential concepts developed, and a list of suggested activities of a rather academic type is given at the end of each chapter. Several books are suggested at the end of each unit, but there are no specific references to appropriate material.

The material on "Earth Sciences" and "Physics" is interesting and informational. The pupil will find it written in a style and in terms that should be meaningful to him. In many cases, typical physics concepts and principles are most interestingly woven in with historical facts. This intermingling is particularly characteristic of the chapter on "Flying," which to the casual observer seems to devote sixteen of the twenty-seven pages to a history of flying. It will be hoped by many that the accompanying laboratory material, which will be off the press this coming summer, will give the pupil more experience in the solving of mathematical problems, since few occur in the "end materials."

In this book, as in so many of the efforts to present the whole gamut of physical science in one year, the pupil must read between the lines and the teacher must provide

¹ George S. Eby, Charles L. Waugh, Herbert E. Welch, and Major Burdette H. Buckingham, *The Physical Sciences*. Boston: Ginn & Co., 1943. Pp. vi+494. \$2.28.

a great deal of supplementary explanation, or both must accept the course as a study about some science facts, interesting in themselves but not always meaningful to the pupil. The laboratory or guide material may help to supplement the textbook in this respect.

The condensation of a mass of material into a few pages, as has been done with chemistry, makes for confusion and lack of clarity. However, statements should be correct, even when expressed with brevity. Attention is called to three specific references. In the section on iron, this statement occurs:

There are huge deposits of iron oxide in the world, and it is a comparatively simple matter to remove the oxygen from these and have pure iron left. It is much more difficult and expensive to remove phosphorus and sulphur from iron ore, and for this reason the steel mills get most of their iron from the Great Lakes region, where there is little phosphorus and sulphur, instead of from Oregon, where the ore contains a great amount of these two elements [p. 424].

While such a statement may seem evident to pupils in the Mountain states, it will have little meaning to pupils east of the Rockies.

Again, in speaking of the making of steel, the statement appears: "Since an open-hearth furnace will hold about seventy-five tons of material, it is suitable for the production of large sheets or blocks of steel, such as are needed for armor plate or bridges" (p. 426). In a full-page sketch of a blast furnace, the pupil is led to believe that coke, iron ore, and limestone are placed in the furnace in layers, one above the other. In each of these cases, the implication is certainly different from the facts.

Except for a few pages in which the main natural resources of each of the political divisions of the world are given, there is practically no reference to chemistry in its application to the war effort, to strategic materials, to recent developments in chemistry, such as the magnesium industry, and to the need for conservation. The section on chemistry is written as a cold presentation of facts,

dealing mostly with the products of chemistry but exhibiting no effort to relate these facts to the war or to the life of the individual pupil as a member of society. In the opinion of the reviewer, the teachers and pupils who use this book will wish that the material on chemistry were written as interestingly as are the other sections.

MARTIN V. MCGILL

*George Williams College
Chicago, Illinois*

A TEXTBOOK FOR A SURVEY OF THE PHYSICAL SCIENCES.—The authors of a recent volume¹ state that their book is "the product of eight years of experience and constant experimentation in the presentation of a survey course in physical science as a part of a general education program" (p. v). The material contained certainly bears out this statement. The book is one of the best of its type that the reviewer has seen in the past few years.

The subject matter covering the major fields is exceptionally well integrated. The amount of space given to these fields is fairly well apportioned on the basis of their relative importance. In a book of this type it is difficult to achieve proper integration of the various subject areas, but the difficulty has been well handled here.

Two very useful chapters dealing with the tools of science and the mathematics of science are found early in the book. These chapters are clearly and concisely written and provide a good review of the simple mathematical processes needed to master the quantitative problems arising in the various fields.

No physical division of the subject matter into units or areas is made, yet these divisions are implied by the arrangement of the chapters. Thus the student or the teacher, if he wishes, can make the subdivisions according to his own judgment. In rough outline the authors give first a general overview

¹ Nicholas D. Cheronis, James B. Parsons, and Conrad E. Ronneberg, *The Study of the Physical World*. Boston: Houghton Mifflin Co., 1942. Pp. x+884+xiv. \$3.85.

of the world in which we exist, dealing with such subjects as time, mountains, weathering of the surface, and volcanoes. Discussions of motion, force, gravitation, and related subjects lead into an explanation of our planetary system in light of these principles. A discussion of the sun introduces a general area concerning energy and combustion. At this point a general treatment of the structure of matter ensues, beginning with the nature of electric charge, going on to the structure of the atom, the periodic table, and then "The Driving Forces of Chemical Reaction." Chemistry in general then enters the picture and is discussed largely from the point of view of modern use. Electricity and magnetism follow, to be succeeded by chapters on sound and light. The book is concluded by a discussion of the concepts of the origin of our planetary system, its possible age, and a calendar of past events in our geological history.

Each chapter is followed by a comprehensive summary of the material covered, including not only concepts, laws, and principles, but also uses to which these may be put in everyday life. A group of study exercises consisting of thought questions, problems, and examination-type items—not always graded as to difficulty—is also included. A list of suggested reference readings among the more recent volumes completes each chapter.

This volume was written from a modern viewpoint and frequently brings into discussion new inventions and developments of our present-day industry in order to point out basic physical concepts that were used to produce modern inventions and developments. In support of this trend the illustrations used are very modern, and the line drawings are chosen to illustrate and to highlight important ideas and concepts.

ARTHUR D. PICKETT

University of Chicago

HELP FOR TEACHERS OF SLOW LEARNERS.

—Teachers who have turned hopefully to

bibliographies for help in the selection of materials, only to be disappointed by limitations of particular lists, should take heart in Carpenter's *Gateways to American History: An Annotated Graded List of Books for Slow Learners in Junior High School*.¹ There is about this book a below-the-surface thoroughness that gives a reader assurance of its practical usefulness.

Part I, the Introduction, is helpfully explanatory, yet to the point. Without digression, the author presents the problem of slow learners at the junior and senior high school levels, shows the responsibility of the school in meeting the special needs of these pupils, and indicates the social implications tied up in the success or the failure of teachers to provide for these special needs. She takes the definite position that "guidance in reading is as necessary to effective social-studies teaching as instruction in subject matter" (p. 18) and that the social-studies teacher "must be prepared to teach the reading skills required in his own field" (p. 20).

The basis for the selection of the readings in American history included in this book is set forth definitely. Such a statement as: "The criteria have been refined as the study progressed in the light of further experience and criticisms given by persons working in related areas—teachers of English and of history, experts in the instruction of slow learners, and children's librarians" (p. 25), confirms the impression given by the book that this study has unfolded gradually and surely out of a need definitely recognized, a plan clearly conceived, and a purpose industriously carried out. Confidence in the results is encouraged by the brief account of the process of selection and of the subsequent appraisal by pupils. More than six thousand volumes were examined to produce the two hundred and more recommended. These two

¹ Helen McCracken Carpenter, *Gateways to American History: An Annotated Graded List of Books for Slow Learners in Junior High School*. New York: H. W. Wilson Co., 1942. Pp. 256. \$2.25.

hundred odd have been used with satisfactory results by slow learners in metropolitan, urban, and rural schools.

Part II, the Bibliography, makes up the bulk of the book. The list is arranged under headings that follow a chronological order, with supplementary sections on transportation, communication, and a biographical section called "The Hall of Fame." The books are annotated under the headings: "Synopsis," "Appeal," "Technical Analysis," and "Format." The notes listed under "Technical Analysis" are especially pertinent for the teacher who is looking for the right book for a special child.

Part III, the Appendix, includes book lists for the teacher; a directory of publishers; and indexes of authors, subjects, and persons. Through these pages a teacher might be guided to material that would contribute to a fuller understanding of how to meet individual classroom problems; might be helped in locating other materials; and, through the indexes, surely would be helped in an effective use of the volume itself.

The usefulness of the book is not limited to librarians and teachers of the social studies. As indicated in the Preface, the criterion of selection that has been developed makes a contribution in itself. The Bibliography is also a guidepost to writers and publishers, pointing to those fields where the need for materials is most urgent. Of the book's grade levels and subject range, the author states:

Although directed mainly toward the junior high school, the bibliography is intended to assist senior high school teachers of American history since the curriculum content as well as the interests and reading abilities of slow learners overlap greatly at these levels. Listing largely fiction and biography, the bibliography should be useful to English teachers also [p. 5].

A careful consideration of the volume—its motive, method, and content—suggests that it will serve most adequately the ends intended for it by its author.

ESTHER HOLCOMB

Chicago, Illinois

★

CURRENT PUBLICATIONS RECEIVED

METHOD, HISTORY, THEORY AND PRACTICE

BALDWIN, T. W. *William Shakspeare's Petty School*. Urbana, Illinois: University of Illinois Press, 1943. Pp. 240. \$3.00.

BERKSON, I. B. *Education Faces the Future: An Appraisal of Contemporary Movements in Education*. New York: Harper & Bros., 1943. Pp. xii+346. \$3.50.

CARSON-COOLING, G. *Education in Post-war Reconstruction*. Brisbane, Queensland, Australia: G. Carson-Cooling (Brisbane Grammar School), 1943. Pp. 66.

Child Behavior and Development: A Course of Representative Studies. Edited by Roger G. Barker, Jacob S. Kounin, and Herbert F. Wright. New York: McGraw-Hill Book Co., Inc., 1943. Pp. viii+652. \$4.00.

FINE, BENJAMIN. *Educational Publicity*.

Published under the Sponsorship of American Council on Public Relations, Palo Alto, California. New York: Harper & Bros., 1943. Pp. xiv+320. \$3.00.

HAYES, MARGARET LOUISE. *A Study of the Classroom Disturbances of Eighth Grade Boys and Girls*. Teachers College Contributions to Education, No. 871. New York: Teachers College, Columbia University, 1943. Pp. x+140. \$1.85.

KANDEL, I. L. *The Cult of Uncertainty*. The Kappa Delta Pi Lecture Series. New York: Macmillan Co., 1943. Pp. x+130. \$1.50.

KOTSCHNIG, WALTER M. *Slaves Need No Leaders: An Answer to the Fascist Challenge to Education*. New York: Oxford University Press, 1943. Pp. xvi+284. \$2.75.

LAMOREAUX, LILLIAN A., and LEE, DORRIS MAY. *Learning To Read through Experience*. New York: D. Appleton-Century Co., Inc., 1943. Pp. x+204. \$1.50.

MORRISON, HENRY C. *American Schools: A Critical Study of Our School System*. Chicago: University of Chicago Press, 1943. Pp. x+328. \$3.00.

SLAVSON, S. R. *An Introduction to Group Therapy*. New York: Commonwealth Fund, 1943. Pp. xvi+352. \$2.00.

SMITH, CLEMENT LAWRENCE. *A Boy To Educate*. Boston: Christopher Publishing House, 1943. Pp. 80. \$1.50.

BOOKS FOR HIGH-SCHOOL TEACHERS AND PUPILS

BEAUCHAMP, WILBUR L., and MAYFIELD, JOHN C. *Basic Electricity*. Prepared at the request of the War Department and the U.S. Office of Education in conformance with official Pre-Induction Training Course Outline No. PIT 101. Chicago: Scott, Foresman & Co., 1943. Pp. viii+312. \$1.60.

CANBY, HENRY SEIDEL; OPDYCKE, JOHN BAKER; GILLUM, MARGARET; and CARTER, OLIVE I. *Mastering Good English*. A Modern English Course, Book III. New York: Macmillan Co., 1943. Pp. xvi+496. \$1.68.

COFFMAN, RAMON PEYTON, and GOODMAN, NATHAN G. *Famous Authors for Boys and Girls*. New York: A. S. Barnes & Co., 1943. Pp. vi+168. \$2.00.

DENOEU, FRANÇOIS. *Military French: For Schools, Colleges, and the Armed Forces*. Boston: D. C. Heath & Co., 1943. Pp. xii+356. \$1.75.

DOWNES, JAMES E., SINGER, NATHANIEL H., and BECKER, DONALD. *Latin America and Hemisphere Solidarity*. Boston: D. C. Heath & Co., 1943. Pp. vi+238. \$1.40.

ESTRADA, JUAN MARTÍN DE. *Campo*. Edited with Notes and Vocabulary by Edith Fahnestock and Margarita de Mayo. Boston: D. C. Heath & Co., 1943. Pp. x+130. \$1.20.

The Good Neighbor Series: *Between Mountain and Sea: Chile; Children of the Sun: Peru, Ecuador, Bolivia; The Fertile Land: Brazil; Republics of the Pampas: Argentina, Uruguay, Paraguay* by Sydney Greenbie. Evanston, Illinois: Row, Peterson & Co., 1943. Pp. 84 (each). \$0.56 (each).

The Heath-Chicago Italian Series: *I miei ricordi* di Massimo D'Azeglio. Graded Italian Readers, Book IV, by Vincenzo Cioffari and John Van Horne. Boston: D. C. Heath & Co., 1943. Pp. iv+60. \$0.32.

HOWLAND, HAZEL POPE; JARVIE, LAWRENCE L.; and SMITH, LEO F. *How To Read in Science and Technology*. New York: Harper & Bros., 1943. Pp. xii+264.

JAQUES, H. E. *Plants We Eat and Wear*. Pictured-Key Nature Series. Mount Pleasant, Iowa: H. E. Jaques (709 North Main Street), 1943. Pp. 172. \$1.50 (paper), \$2.50 (cloth).

KANY, CHARLES E. *Spoken Spanish for Travelers and Students*. Boston: D. C. Heath & Co., 1943. Pp. xiv+282. \$1.28.

KANY, CHARLES E., and FIGUEIREDO, FIDELINO DE. *Intermediate Portuguese Conversation*. Boston: D. C. Heath & Co., 1943. Pp. viii+64. \$0.36.

KANY, CHARLES E., and SPERONTI, CHARLES. *Advanced Italian Conversation*. Boston: D. C. Heath & Co., 1943. Pp. vi+78. \$0.48.

LAUGHLIN, BUTLER; MANN, JAMES W.; and HALL, CLIFFORD J. *Study Guide: Being the Topical Index for "The American Educator Encyclopedia"*. Chicago: United Educators, Inc., 1942. Pp. 3953-4086.

PAINTER, MARGARET. *Ease in Speech*. Boston: D. C. Heath & Co., 1943 (revised). Pp. viii+456. \$1.80.

PAYRÓ, ROBERTO J. *Sobre las ruinas: Drama en cuatro actos*. Edited with Introduction, Notes, and Vocabulary by C. K. Jones and Antonio Alonso. Boston: D. C. Heath & Co., 1943. Pp. xxii+152. \$1.00.

Pour lire avec plaisir: Selections from Saint-Juirs, Labiche, Dumas fils, de Gaspé fils,

Musset, Garneau. Edited with Exercises, Vocabulary, and Notes by F. C. A. Jeanerret. Boston: D. C. Heath & Co. Pp. xii+186. \$1.20.

Pre-Induction Training Course: PIT-101, *Fundamentals of Electricity: A Basic Course*, pp. vi+46; PIT-102, *Fundamentals of Machines: A Basic Course*, pp. vi+34; PIT 103, *Fundamentals of Shopwork: A Basic Course*, pp. vi+42; PIT 201, *Fundamentals of Radio: An Applied Course*, pp. vi+24; PIT 202, *Fundamentals of Automotive Mechanics: An Applied Course*, pp. vi+52. Outlines Based upon Technical and Field Manuals of the War Department. Prepared jointly by the Pre-Induction Training Section, Civilian Personnel Division, Services of Supply, and the U.S. Office of Education. Washington: Government Printing Office, 1942. \$0.10 (each).

Readings in Military German. Selected and edited by W. W. Pusey and A. G. Steer, with Concise German Grammar and Vocabulary by B. Q. Morgan. Boston: D. C. Heath & Co., 1943. Pp. viii+316. \$1.50.

STOVER, FRANCES PORTER. *Encanto de México*. New York: Macmillan Co., 1942. Pp. x+104. \$1.32.

Victory Corps Reading List: Containing Books, Mainly Recent, on Issues of the War, Preparation for Military Service, and Activities on the Home Front. Editorial Committee: Neal Cross, Marguerite Kirk, and Max J. Herzberg. Chicago: National Council of Teachers of English, 1943. Pp. 16. \$0.10.

WATSON, JANE C., and MOORE, ANNE Z. *In Central America*. New York: Henry Holt & Co., 1943. Pp. x+180+xliv. \$1.16.

PUBLICATIONS IN PAMPHLET FORM

ALTHAUS, C. B., and TWENTE, J. W. *Plans for Distributing State and County Aid to the Public Schools of Kansas*. University of Kansas Publications, Kansas Studies

in Education, Vol. II, No. 9. Lawrence, Kansas: University of Kansas, 1942. Pp. 20.

BATHURST, EFFIE G. *Phonograph Records as an Aid to Learning in Rural Elementary Schools: A Handbook for Teachers and Supervisors*. New York: University of the State of New York, State Education Department, 1943. Pp. 172.

BOOKWALTER, KARL W., and BOOKWALTER, CAROLYN W. *A Measure of Motor Fitness for College Men*. Bulletin of the School of Education, Indiana University, Vol. XIX, No. 2. Bloomington, Indiana: Bureau of Co-operative Research and Field Service, Indiana University, 1943. Pp. 26. \$0.50.

CORNELL, ETHEL L. *The Work of the School Psychologist*. University of the State of New York Bulletin No. 1238. Albany, New York: University of the State of New York Press, 1942. Pp. 70.

CRONBACH, LEE J. *Exploring the Wartime Morale of High-School Youth*. Applied Psychology Monographs of the American Association for Applied Psychology, No. 1. Stanford University, California: Published for the American Association for Applied Psychology by Stanford University Press, 1943. Pp. 80. \$1.25.

Evaluation of School Broadcasts Bulletins: No. 57, "Auditory Aids and the Teaching of Science: Reports on Two Experimental Studies" by J. Robert Miles, pp. 18, \$0.10; No. 61, "Adolescent Personality and Radio: Some Exploratory Case Studies" by Howard Rowland, pp. 18, \$0.25. Columbus, Ohio: Evaluation of School Broadcasts, Ohio State University, 1942, 1943 (mimeographed).

Fourth Report of the Committee on School and College Relations of the Educational Records Bureau. New York: Educational Records Bureau, 1943. Pp. 56.

GLOVER, KATHERINE. *Women at Work in Wartime*. Public Affairs Pamphlets, No. 77. New York: Public Affairs Committee, Inc. (30 Rockefeller Plaza), 1943. Pp. 32. \$0.10.

- Guiding Principles in Curriculum Development: Prepared as a Guide for Curriculum Development or Curriculum Adaptation.* Curriculum Bulletin No. 2. New York: Board of Education of the City of New York, 1942-43. Pp. 32.
- HENDERSON, LEON N. "A Summer Workshop in Housing: A Report of the 1941 Workshop and Conference in Housing Conducted for Sixteen Teachers of the Assisting Schools by the Sloan Project in Applied Economics of the University of Florida." Gainesville, Florida: Florida Curriculum Laboratory, College of Education, University of Florida, 1942. Pp. 46 (mimeographed). \$0.20.
- LOOSLEY, ELIZABETH W., and BENNETT, NORMA. *Canada at War*. Sponsored by the Canadian Library Council. Booklist, Vol. XXXIX, No. 13, Part 2. Chicago: American Library Association, 1943. Pp. 304-10. \$0.25.
- MONROE, EASON; ROBERTS, HOLLAND D.; and STONE, VIOLET G. *Teaching Reading in the Secondary School*. Prepared for the Subcommittee on Developmental Reading of the General Education Committee, a Joint Committee of the California State Department of Education and the Association of California Secondary School Principals. Bulletin of the California State Department of Education, Vol. XII, No. 3. Sacramento, California: State Department of Education, 1943. Pp. x+50.
- Policies and Practices in the Improvement of Reading*. Edited by John J. De Boer. Chicago: National Council of Teachers of English (211 West Sixty-eighth Street), 1942 and 1943. Pp. 72. \$0.50.
- POLLOCK, THOMAS CLARK; SPAULDING, JOHN GORDON; and READ, ALLEN WALKER. *A Theory of Meaning Analyzed*. Two Papers from the Second American Congress on General Semantics, with a Supplementary Paper. General Semantics Monographs, No. 3. Chicago: Institute of General Semantics, 1942. Pp. xvi+46.
- Salaries of City School Employees, 1942-43*. Research Bulletin of the National Education Association, Vol. XXI, No. 1. Washington: Research Division of the National Education Association, 1943. Pp. 24. \$0.25.
- Sound Educational Credit for Military Experience: A Recommended Program*. Washington: American Council on Education, 1943. Pp. iv+36.
- Suggested Activities for Air Raid Alert Periods*. New York: Committee on Civilian Defense in the Schools, Board of Education of the City of New York. Pp. 28.
- The War, Education, and Society*. Review of Educational Research, Vol. XIII, No. 1. Washington: American Educational Research Association, 1943. Pp. 62. \$1.00.
- ZIMAND, GERTRUDE FOLKS. *Child Manpower—1943*. Publication No. 389. New York: National Child Labor Committee (419 Fourth Avenue), 1943. Pp. 34. \$0.10.
- UNITED STATES OFFICE OF EDUCATION:
 "An Annotated List of Government Publications of Use to Teachers: The Far East" prepared by Ruth A. Gray. Pp. 12 (mimeographed).
- Biennial Survey of Education in the United States, 1938-40*: Vol. II, chap. v, *Statistics of Special Schools and Classes for Exceptional Children, 1939-1940* by Elise H. Martens and Emery M. Foster. Pp. iv+200. \$0.30.
- Educational Directory, 1942-43*: Part II, *City School Officers*. Pp. iv+62. \$0.10.
- School Children and the War Series: Leaflet No. 1, 1943—*School Services for Children of Working Mothers: Why? What? How? Where? When?* pp. 6; Leaflet No. 2, 1943—*All-Day School Programs for Children of Working Mothers*, pp. 12; Leaflet No. 3, 1943—*Nursery Schools Vital to America's War Effort*, pp. 12. \$0.05 (each).

I Se-

-43.

uca-

Wash-

tion-

. 24.

Expe-

Wash-

tion,

Peri-

vilian

duca-

8.

ew of

No. 1.

il Re-

\$1.00.

power

York:

(419

10.

:

t Pub-

ne Far

y. Pp.

United

v, Sta-

ses for

40 by

I. Fos-

part II,

\$0.10.

: Leaf-

ces for

Why?

pp. 6;

School

Working

1943—

a's War